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Report to the Chairman, Subcommittee on Superfund, Ocean and Water Protection, Committee on Environment and Public Works, U.S. Senate

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SUPERFUND

A More Vigorous and Better Managed Enforcement Program Is Needed

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The Honorable Frank R. Lautenberg
Chairman, Subcommittee on Superfund,
Ocean and Water Protection
Committee on Environment and Public Works
United States Senate

Dear Mr. Chairman:

As requested, this report discusses the Environmental Protection Agency's (EPA) Superfund enforcement program. The report covers EPA's (1) process for identifying liable and financially viable parties to hold responsible for cleaning up Superfund sites; (2) use of its enforcement tools, including negotiations, unilateral administrative orders, and mixed funding and de minimis settlements; (3) recovery of its costs in cleaning up Superfund sites; and (4) management of the enforcement program. The report contains two matters for the Congress to consider when amending the authorizing legislation and a number of recommendations for EPA to improve its management of the Superfund enforcement program.

Unless you publicly release its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies of this report to the appropriate congressional committees; the Administrator, EPA; and the Director, Office of Management and Budget. We will also make copies available to others upon request.

This work was performed under the direction of Richard L. Hembra, Director, Environmental Protection Issues (202) 275-6111. Major contributors are listed in appendix II.

Sincerely yours,

J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

Cleaning up the nation's most dangerous hazardous waste sites will require the help of the parties responsible for the contamination. Federal funding alone, though substantial, is insufficient to tackle this serious and costly pollution problem. To obtain these responsible party cleanups in a timely and efficient manner, the Environmental Protection Agency (EPA) needs to have a vigorous and effective enforcement program. Concerned that this has not been the case, the Chairman, Subcommittee on Superfund, Ocean and Water Protection, Senate Committee on Environment and Public Works, asked GAO to review EPA's enforcement program.

Background

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) created the Superfund program, which is managed by EPA, to clean up the most dangerous abandoned hazardous waste sites. CERCLA, as amended, gave EPA the authority to compel responsible parties to clean up sites and authorized $10.1 billion for federal cleanups when willing and able responsible parties could not be found. EPA expects that the cleanup costs for the current 1,200 Superfund sites will total $30 billion, assuming half of the work will be done by Superfund and half by responsible parties. Currently, the average cost to clean up a site is $25 million, and EPA expects that figure to grow as some of the more complex sites move into the cleanup phase.

EPA's enforcement process begins with a search for responsible parties. Once they are found, EPA sends these parties a notice of their responsibilities and offers to begin negotiations on the degree of cleanup needed at the site. If a settlement cannot be reached, EPA can, under section 106 of the act, order parties to take action. These administrative orders are enforceable in court if EPA, among other things, demonstrates that the site presents an "imminent and substantial endangerment" to public health or the environment. As an alternative to ordering responsible party action, EPA can use Superfund money for the cleanup and attempt to recover the money from responsible parties.

Results in Brief

Although the federal government has an important financial stake in the success of Superfund enforcement, EPA's enforcement efforts have been hampered by (1) delayed and incomplete attempts to find responsible parties, (2) insufficient use of section 106 orders to compel recalcitrant parties to begin cleanup operations, (3) growing backlogs of cases where a recovery of federal cleanup costs should be sought, and (4) narrow interpretations of what federal costs are recoverable.

A June 1989 comprehensive management review of Superfund by EPA recognized many of the problems discussed in this report and proposed corrective actions. EPA has promised to refocus Superfund to give clear preference to responsible-party cleanups over fund-financed cleanups and to apply greater resources to enforcement activities. However, EPA has not yet acted in two areas that GAO believes are critical to improvements in enforcement: establishing long-term, measurable goals and determining the resources required to reach these goals.

Principal Findings

Responsible Party Searches

The success of EPA's enforcement program depends largely on effective responsible party searches—attempts to find liable parties able to fund cleanups. As of October 1988, no such parties had been found for about one-third of the Superfund sites ready for cleanup.

Half of the EPA Superfund project mangers and attorneys GAO surveyed were dissatisfied with the quality of responsible party searches they had used. Also, an EPA study found that the searches were incomplete because of deficiencies in data collection and poorly conducted interviews. Subsequently, EPA took some corrective action, but GAO believes that EPA also needs to better track information requested from responsible parties and more systematically identify searches that should be redone. GAO also concluded that promoting a toll-free hot line for the general public to use to report to EPA the identity of suspected responsible parties could augment EPA's enforcement efforts. Additionally, more emphasis needs to be placed on the timeliness of searches. Because, in part, of staff shortages, about one-fourth of recent searches have been completed late—less than 90 days before, or anytime after, the studies had been started to select a cleanup remedy at the sites. Earlier identification of parties is important because responsible parties who participate in the studies are generally more willing to finance remedies.

Administrative Orders

Although administrative orders can be a powerful enforcement technique, EPA has made limited use of them. In a recent 2-year period, about 80 percent of the time, responsible parties have complied with the administrative orders EPA has issued or settled with EPA to avoid the orders. Nevertheless, EPA has used these orders only sparingly to close

lengthy negotiations or to force action when negotiations were unsuccessful. EPA issued orders for only 2 of the 18 sites included in GAO's review where negotiations continued beyond EPA's completion target. Similarly, only 6 orders were used for 28 reviewed sites at which negotiations failed. Cleanup of the other 22 sites was to be financed by Superfund. Almost 60 percent of Superfund project managers and attorneys GAO surveyed thought that EPA should use administrative orders more frequently.

Following its recent Superfund review, EPA proposed to increase issuance of administrative orders. However, GAO found that a major impediment to greater use of the orders is the CERCLA requirement that they are enforceable in court only upon a demonstration of "imminent and substantial endangerment." Neither CERCLA nor its legislative history defines this term and courts have not consistently interpreted it. EPA and Justice officials told GAO that the requirement was a barrier to the use of administrative orders and could see merit in eliminating it.

Cost Recovery

Because cost recovery has been considered a low priority within EPA and received limited staff resources, it has faltered. Through June 1989 EPA collected only $157 million, or 35 percent, of the $450 million it hoped to recover by 1991. The seriousness of the problem is heightened by recent EPA projections that each year new sites will be added to the Superfund list faster than EPA's ability to decontaminate existing sites.

At the three EPA regions GAO visited, letters demanding payment were not issued or were issued from 4 to 18 months late in 71 percent of 48 reviewed cases. Officials blamed understaffing for the delays. Also, most Superfund project managers and attorneys GAO surveyed said the priority given to cost recovery was too low. Late action to recover costs jeopardizes recovery, costs the government interest income, and reduces the credibility of the enforcement program.

EPA's recovery has also been affected by its exclusion of various indirect costs from its definition of recoverable costs. These exclusions, which totaled $800 million as of September 30, 1988, include the costs of research and development and preliminary work at potential Superfund sites. EPA plans to define recoverable costs in a rule to be promulgated by July 1991. However, since CERCLA does not specifically authorize the recovery of indirect costs and courts have ruled differently on the issue, even with rulemaking, legal challenges to EPA's cost recovery actions are

likely and their outcome uncertain. Accordingly, congressional intervention would seem to be appropriate.

Determining Goals and Resources

Following its Superfund review, EPA announced a reorientation of the program to give greater emphasis to enforcement. EPA's report recommended actions to address problems GAO found, including changes to policies or procedures for responsible party searches, administrative orders, and cost recovery. However, to give specific direction to the enforcement effort and make greater achievements possible, EPA now needs to set measurable, long-term program goals and determine what resources are needed to achieve them. In this regard, staffing constraints contributed to many of the problems disclosed by GAO's review. Ninety-six percent of the 252 Superfund project managers and attorneys who responded to GAO's survey thought their region needed more staff to properly carry out the Superfund enforcement program. GAO reported in October 1987 that EPA needs more objective techniques to determine Superfund's staffing needs. This problem still exists.

Matters for Congressional Consideration

To eliminate an obstacle to using section 106 enforcement authorities, the Congress may want to consider amending CERCLA to repeal the "imminent and substantial endangerment" requirement. To minimize future legal challenges to EPA's cost recovery activities, the Congress may also wish to amend section 107 to specifically authorize the recovery of Superfund's indirect costs. Additionally, the Congress may want to identify the kinds of indirect costs that EPA should seek to recover.

Recommendations

To provide a systematic approach for implementing its Superfund enforcement initiatives, EPA should establish long-term, measurable goals for implementing the Administrator's Superfund strategy and identify the resource requirements that will be needed to meet these long-term goals. GAO also makes other recommendations to improve EPA's enforcement activities.

Agency Comments

GAO discussed the report's contents with responsible EPA officials and included their comments where appropriate. But as requested, GAO did not obtain official agency comments on a draft of this report.

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Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOJ	Department of Justice
EPA	Environmental Protection Agency
GAO	General Accounting Office
NEIC	National Enforcement Investigations Center
NPL	National Priorities List
OECM	Office of Enforcement and Compliance Monitoring
OSWER	Office of Solid Waste and Emergency Response
PRP	potentially responsible party
RCED	Resources, Community, and Economic Development Division
RD/RA	remedial design and remedial action
RI/FS	remedial investigation and feasibility study
SARA	Superfund Amendments and Reauthorization Act
SCAP	Superfund Comprehensive Accomplishment Plan
SNL	special notice letter
SPMS	Strategic Planning Management System

Chapter 1

Introduction

Nationwide, thousands of waste disposal sites have been contaminated with hazardous substances that threaten public health and the environment. The Congress' commitment to solving this immense and expensive problem culminated with the passage of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, which created the Superfund program.

Under CERCLA, those responsible for the presence of hazardous substances at a hazardous waste site must either clean up the site themselves or pay the cost of an Environmental Protection Agency (EPA) cleanup. Concerned with the efficiency and effectiveness of EPA's efforts to obtain cleanups or recover costs from the parties responsible for the pollution, the Chairman, Subcommittee on Superfund, Ocean and Water Protection, Senate Committee on Environment and Public Works, asked us to review EPA's Superfund enforcement activities. We issued an interim report on this request in October 1988.[1] This is our final report.

Background

CERCLA gave the federal government broad authority to respond directly to releases (or threatened releases) of hazardous substances and pollutants or contaminants that might endanger public health or the environment. It established a 5-year, $1.6-billion trust fund (Superfund), financed primarily with a tax on crude oil and certain chemicals. CERCLA also enabled the federal government to recover the costs of any action from those responsible for the problem or to compel them to clean up the hazardous site at their own expense. By executive order, the President assigned EPA the primary responsibility for running the Superfund program.

On October 17, 1986, the Congress enacted the Superfund Amendments and Reauthorization Act (SARA) of 1986. Among other things, SARA

- reauthorized the program for 5 years, while increasing the size of the trust fund by $8.5 billion;
- stressed permanent remedies and treatment or recycling technologies for cleaning up hazardous waste sites;
- set specific cleanup goals and standards; and
- provided new enforcement authorities and settlement tools to better enable EPA to obtain responsible ("private") party cleanups of hazardous waste sites.

[1] Superfund: Interim Assessment of EPA's Enforcement Program (GAO/RCED-89-40BR, Oct. 12, 1988).

Site Prioritization and Cleanup Process

EPA ranks hazardous waste sites according to the severity of the waste problem and places only the worst on its national priorities list (NPL) for cleanup under Superfund. As of July 1989, this list contained 889 sites, with an additional 335 proposed for inclusion.

There are two basic types of Superfund-financed cleanups: removal actions and remedial actions. Removal actions are short-term responses to address immediate and significant threats at any hazardous waste site but are not necessarily final solutions. Remedial actions are long-term efforts to mitigate or permanently eliminate conditions at hazardous waste sites. These remedial actions are limited to those sites on the NPL.

To ensure that appropriate remedial cleanup actions are taken, EPA conducts a remedial investigation and a feasibility study (RI/FS) for each NPL site to identify the types and quantities of hazardous wastes present and to consider alternative remedies for cleaning up the waste. After completing the RI/FS, EPA chooses a remedy for implementation and incorporates it in a record of decision. Thereafter, the selected remedy is refined and specified in the remedial design phase of the process. Once designed, a remedial action is taken to implement the chosen remedy.

The Enforcement Program

A primary theme of the Superfund legislation is that the parties responsible for the hazardous waste take responsibility for the cleanup. Accordingly, the Congress provided EPA with strong legal authorities to implement an enforcement program to achieve timely, privately funded cleanup actions or cost recovery settlements. SARA's legislative history shows that the Congress recognized that without a highly successful enforcement program, EPA would never achieve the objectives of the Superfund legislation because EPA, by itself, could not secure the financial and human resources required to address the nation's problem hazardous waste sites.

Underscoring the need to avoid the depletion of Superfund's resources, a June 1989 report by the EPA Administrator stated that EPA estimates that the cost of construction (cleanup) at current NPL sites is likely to be $30 billion, assuming that half of the work will be done directly by the fund and half by responsible parties.[2] This amount is far in excess of the

[2]William K. Reilly, Administrator, EPA, A Management Review of the Superfund Program, Washington, D.C., June 1989. This "90-day study" of Superfund was prepared pursuant to a promise the Administrator made earlier in 1989 during Senate hearings to confirm his appointment.

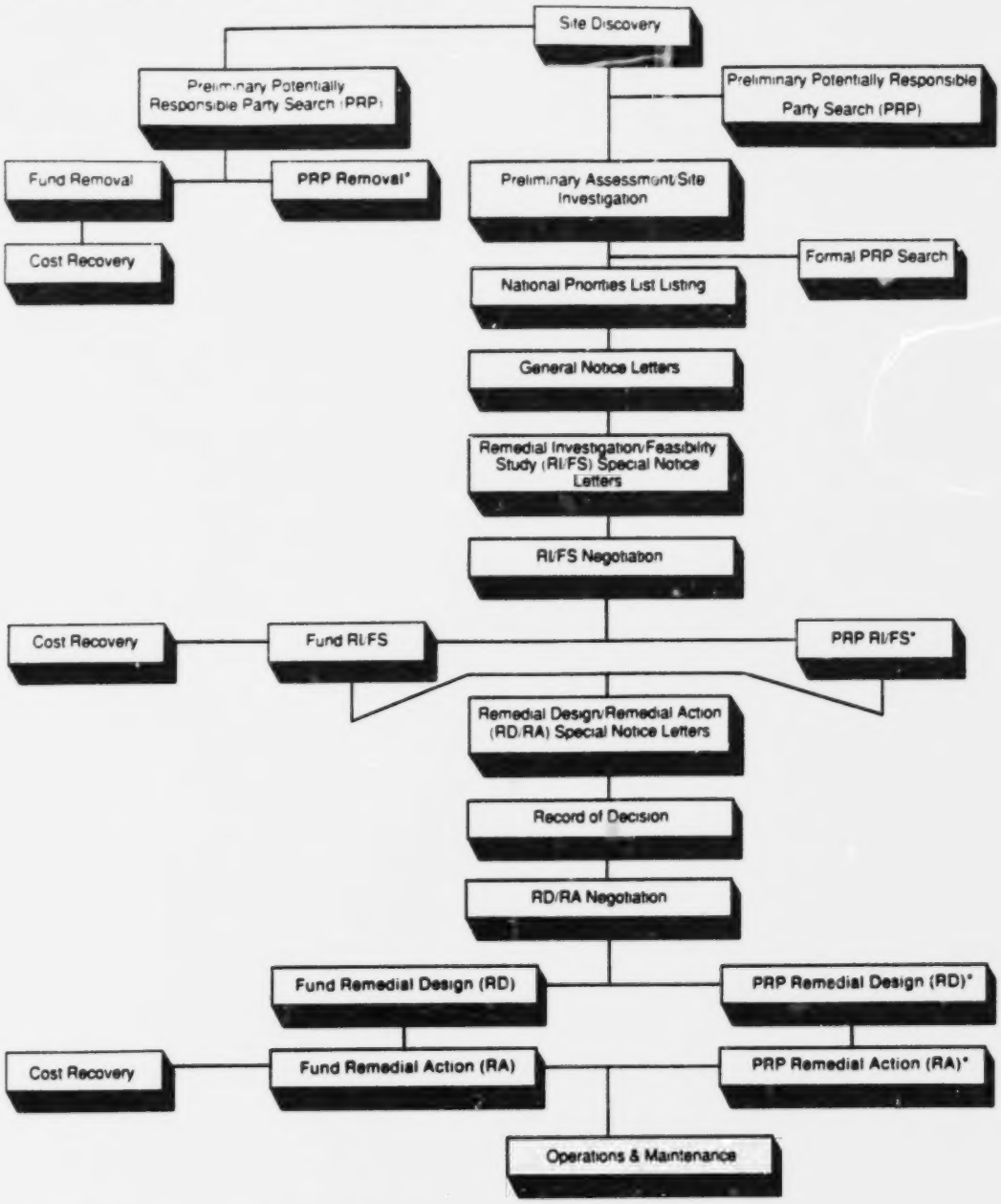
$10.1 billion provided by SARA. The report stated that it will probably take about 13 years to begin construction just on sites that are currently on the list and that the Agency expects to add sites to the inventory at the rate of about 75 to 100 per year. By the year 2000, the report estimated that the NPL will grow to 2,100 sites. Additionally, it predicted that the average cost of construction per site, currently at $25 million, will increase as some of the more complex sites move into the construction phase.

Overview of the Enforcement Process

Figure 1.1 shows an overview of the Superfund cleanup and enforcement process. First, after a site has been identified as a potential Superfund site, EPA searches for potentially responsible parties (PRPs). The search is used to establish the liability and financial viability of those responsible for site cleanup. Those liable may include individuals, corporations, or other entities that are past or present owners of sites, as well as generators or transporters who contributed hazardous substances to sites. According to EPA guidance, the PRP search should include all of the following tasks:

- Collect and review all government records, such as hazardous waste manifests, permits, and investigations, pertinent to the site and relevant to the PRP search.
- Prepare, issue, and follow up on information request letters to obtain data on hazardous waste management practices at the site from PRPs.
- Obtain information on a company's or individual's ability to pay for remedial action.
- Obtain information (i.e., prepare a history) on activities at the site that may have resulted in hazardous and/or solid waste spills or disposal.
- Interview government officials, especially state and local officials, to develop additional information on the site and PRPs and to identify government agencies or private parties that may possess relevant documents or information.
- Update PRPs' names and addresses.
- Develop background information on companies or individuals identified as PRPs.
- Organize documents into a system that will allow the user to easily access and review information in the documents, as well as maintain accurate documentation of all findings.
- Prepare a written summary (report) describing the work done, the results achieved, and recommendations for additional work.
- Obtain a title search to identify past and present site owners.

Figure 1.1: Superfund Cleanup and Enforcement Process



*EPA also seeks to recover its costs for the oversight of these activities.

Besides these tasks, EPA's guidance identifies 18 other specialized tasks that may be useful in some, but not all, searches to further characterize the relationship between PRPs and the site. Of the 18 specialized tasks, the 2 most frequently conducted tasks were a review of PRP files and interviews of PRPs and private citizens. Another specialized task involves an assessment of the financial information collected under the third task above. Although EPA generally contracts for most of its searches, EPA can use its National Enforcement Investigation Center (NEIC) in Denver, Colorado, to conduct the financial research and assessment portion of the search.[3]

EPA guidance states that the PRP search should be initiated at the time a site is submitted to EPA headquarters for inclusion on the NPL. However, the guidance states that some of these search activities (tasks) are conducted earlier at the time of site identification (discovery), especially at removal sites where immediate action is indicated, to identify obvious PRPs that may be available to finance the cleanup.

To the extent the search identifies PRPs liable for the hazardous conditions at the site, EPA is to issue them a general notice letter to inform them that they are potentially liable for response costs under section 107 of CERCLA. Among other things, these letters should include information on future notices, site response activities, and the identity of other PRPs at the site. These letters also may encourage the PRPs to notify EPA by a specified date of their interest in participating in future negotiations on the site's cleanup. EPA's PRP search activities are discussed in further detail in chapter 2.

Overview of Enforcement Authorities

When PRPs are willing to participate in the site's cleanup, EPA attempts to negotiate an agreement with them, first for the conduct of the RI/FS, and then, for the remedial design and remedial action (RD/RA). To begin these negotiations, SARA authorized EPA to issue PRPs a special notice letter. These letters provide a moratorium on EPA's commencement of the RI/FS or remedial action to give PRPs a reasonable time period in which to negotiate an agreement with EPA. These letters are discussed in more detail in chapter 3.

[3]NEIC is an organizational entity within EPA's Office of Enforcement and Compliance Monitoring that provides technical support for litigation development in enforcement cases that have major precedential implications or require unusual or extremely sophisticated technical support or national management. It also provides technical support and assistance for criminal litigation under all of EPA's environmental statutes.

Any negotiated agreement between EPA and PRPs is incorporated into a consent order or consent decree. A consent order is an administrative order issued by EPA that is agreed to by the responsible parties, which EPA generally uses for agreements reached with PRPs for performing the RI/FS. While a consent decree is also agreed to by responsible parties, SARA requires all agreements for remedial action to be in the form of a consent decree and to be entered into federal court. Accordingly, EPA refers all consent decrees for approval to the Department of Justice (DOJ), which then enters them in federal court.

There are generally three types of settlements. Under the first, which is most commonly used, PRPs agree to provide a substantial portion, usually 100 percent, of the cleanup. The other two types, both authorized by SARA, are mixed-funding and de minimis settlements. Mixed funding occurs when monies from both Superfund and responsible parties are used at the same site. Mixed funding is most likely to be approved when some, but not all, of the liable PRPs are willing to perform the cleanup and when there are financially viable nonsettlers from whom EPA can recover Superfund's share of the mixed-funding agreement. De minimis settlements involve parties who contributed very small amounts of hazardous waste of low toxicity to a site. At some Superfund sites, responsible parties can number in the hundreds. A de minimis settlement can eliminate the sometimes numerous minimal contributors from negotiation and litigation, which can save money and staff resources.

Under a de minimis settlement, EPA can reach a separate agreement whereby de minimis parties agree to pay their share of the cleanup cost, provided this share involves only a minor portion of the total cleanup costs, and possibly a premium to cover future cost overruns and future response actions. In turn, this settlement reduces the number of parties EPA must deal with in reaching an agreement on the site's cleanup, which can make negotiations easier. Further, should judicial action become necessary to obtain such cleanups, these settlements would reduce the transactional cost of pursuing liable parties because de minimis settlements relieve the affected parties of their liability. Accordingly, neither EPA nor the parties being sued would have an incentive to bring the de minimis parties into any legal proceedings. Chapter 3 discusses the use and benefits of mixed-funding and de minimis settlements.

When EPA is unable to reach a negotiated agreement, it has two options under CERCLA to obtain a PRP response. First, under section 106, EPA can

issue an administrative order unilaterally to responsible parties to compel them to clean up a site where there may be an imminent and substantial endangerment to human health or the environment because of an actual or threatened release of a hazardous substance from a facility.

These orders are one of the most potent administrative remedies available to EPA under any existing environmental statute. That is, any PRP who willfully violates such an order, without sufficient cause, can be fined up to $25,000 a day or held liable for punitive damages of up to three times the total cleanup costs if EPA cleans up the site. Furthermore, when noncompliance with an order occurs, EPA can seek court enforcement of the order by referring the case to Justice. Section 106 also authorizes EPA to have Justice secure in federal district court such relief as may be necessary to abate any danger or threat. That is, EPA can bypass the step of issuing an administrative order and proceed directly to court to obtain a court-ordered cleanup. EPA's use of these enforcement tools is also discussed in chapter 3.

As an alternative to section 106, EPA can clean up the site from Superfund under section 104 and then seek recovery of its cleanup costs from PRPs under section 107. To obtain reimbursement, EPA issues letters to PRPs demanding payment for its response costs—all cost of removal, remedial, and enforcement action. When these demand letters do not result in a settlement, EPA can seek reimbursement in the courts by referring the case to Justice. EPA's cost recovery activities are discussed in chapter 4.

As a result of court decisions, EPA has been provided with considerable leverage in getting PRPs to perform or pay for clean ups under sections 106 and 107. The courts have held that PRPs are jointly and severally liable for a site's cleanup. Joint and several liability means that parties responsible at a Superfund waste site can all be sued together, or any one party may be sued alone for 100 percent of cleanup costs, provided the harm attributable to the site is not divisible.

EPA also has a number of other enforcement tools. It can issue subpoenas to obtain information, file liens against property to help recover its cleanup costs, and issue nonbinding preliminary allocations of responsibility to show PRPs their share of a site's cleanup costs.

Superfund Enforcement Program Administration

EPA administers the Superfund enforcement program through its Office of Solid Waste and Emergency Response (OSWER), Office of Enforcement and Compliance Monitoring (OECM), and 10 regional offices. Within OSWER, the Office of Waste Programs Enforcement is responsible for providing agencywide policy, guidance, and direction for Superfund enforcement.

OECM provides direction and guidance to OSWER and the regions on case development, administrative actions, and compliance. It also provides simultaneous review of enforcement cases referred to Justice by EPA's regions.

At the local level, primary responsibility for carrying out Superfund enforcement actions rests with EPA's 10 regions. In carrying out their actions, the regional offices usually employ

- on-scene coordinators responsible for overseeing removal actions at hazardous waste sites,
- project managers responsible for overseeing remedial actions at NPL sites and/or technical aspects of enforcement cases,
- attorneys (Office of Regional Counsel) responsible for the legal aspects of settlements and enforcement actions, and
- civil investigators responsible for undertaking PRP searches and managing contracted PRP searches.

Program Accomplishments

Table 1.1 shows, as of September 7, 1989, the number of EPA Superfund cleanup actions since SARA was enacted. EPA's initial goal was to have PRPs finance 50 percent of remedial designs and actions started, according to 1985 testimony by the EPA Administrator. At a 1987 Superfund conference, the Assistant Administrator, OSWER, was quoted as having said this goal was 33 percent, but hoped it would rise to 50 percent. Between SARA's enactment and September 7, 1989, PRPs have financed 41 percent of all remedial design starts and 37 percent of all remedial action starts.

Table 1.1: Cleanup Actions Between Enactment of SARA and September 7, 1989

Activity	Total	Number of actions fund-financed	PRP-financed	Percentage PRP-financed
Removal starts[a]	**909**	635	274	30
Removal completion	**731**	548	183	25
RI/FS starts[b]	**470**	272	198	42
Remedial design starts[b]	**334**	198	136	41
Remedial action starts[b]	**204**	128	76	37

[a]Includes NPL and non-NPL sites.

[b]Includes first and subsequent starts.
Source: EPA

Table 1.2 shows through September 7, 1989, the extent to which EPA has used its various settlement and enforcement tools since SARA. In addition, through June 30, 1989, EPA has recovered about $157 million in costs it incurred in cleaning up sites. According to OSWER officials, EPA's goal is to recover $450 million in costs by 1991.

Table 1.2: Settlement and Enforcement Actions Between Enactment of SARA and September 7, 1989

	Number of sites
Settlements[a]	
RI/FS settlements	177
RD/RA settlements[b]	78
Mixed funding	9
De minimis	18
Enforcement	
Section 106 orders for removals	117
Section 106 orders for RD/RA	38
Section 106 referrals to Justice to obtain RD/RAs from PRPs	3
Subpoenas[c]	16
Liens	81

[a]Except for RI/FS settlements, includes settlements referred to EPA headquarters and/or Justice.

[b]Includes mixed-funding settlements.

[c]As of September 30, 1988.
Source: EPA

Objectives, Scope, and Methodology

On August 12, 1987, the Chairman, Subcommittee on Superfund, Ocean and Water Protection, Senate Committee on Environment and Public Works, requested that we review EPA's Superfund enforcement program. We subsequently agreed to determine whether (1) EPA is using its

enforcement tools to accomplish CERCLA's goals and requirements, (2) EPA can do a better job of recovering cleanup costs from PRPs, and (3) EPA has the necessary framework to plan, manage, and oversee its Superfund enforcement program.

Our report to the Chairman on October 12, 1988, entitled Superfund: Interim Assessment of EPA's Enforcement Program (GAO/RCED-89-40BR) provided the preliminary results of our review. This report updates certain information in the interim report and provides a more comprehensive evaluation of EPA's Superfund enforcement program.

We performed our work at EPA headquarters in Washington, D.C., and EPA Regions II (New York City), V (Chicago), and IX (San Francisco). These regions were selected to obtain geographical distribution and because each ranks among the top 5 of EPA's 10 regions in the number of sites on the NPL.

To obtain the views of EPA enforcement officials on the issues relating to this review, we also sent a mail-in questionnaire to all regional project managers and attorneys and to selected headquarter employees involved in the Superfund enforcement program. We sent follow-up questionnaires to encourage responses from individuals not responding to the initial mailing. In all, we sent questionnaires to 492 employees and received responses from 383, for a response rate of 77.8 percent. Because regional project managers and attorneys are the key officials implementing EPA's various enforcement actions, we report for the most part only the responses we received from 255, or 68.5 percent, of the 372 regional project managers and attorneys that EPA identified as working in the Superfund program and to whom we sent our questionnaire. Appendix I contains a copy of our questionnaire and summary data.

We also obtained information on EPA's Superfund enforcement program by reviewing, in particular, site enforcement activities conducted in EPA Regions II, V, and IX between February 1987, when EPA issued guidance on the management of negotiations under special notice letters, and September 1988. We later extended our review through September 1988. We specifically evaluated (1) negotiations seeking responsible party participation in RI/FSs; (2) enforcement tools used to facilitate negotiations or used when negotiations failed; and (3) efforts to achieve cost recovery when trust fund money was used to carry out cleanup actions.

We relied on data from EPA's Comprehensive Environmental Response, Compensation, and Liability Information System to help identify site

enforcement activities for review within EPA Regions II, V, and IX. This system is a national inventory of hazardous waste sites, and only sites entered into it are evaluated and considered for inclusion in the NPL. For NPL sites, the system contains data on the sites' cleanup and enforcement activities. EPA personnel cautioned us about the developmental status of this information system and expressed concerns regarding the validity of the system's present data. However, EPA personnel also advised us that this system is the best central source of data on cleanup and enforcement activities at NPL sites. Accordingly, we used the system's data to assess whether PRP searches were being completed on time.

We obtained specific information regarding site enforcement activities by interviewing EPA regional civil investigators responsible for PRP searches, regional project managers responsible for monitoring the applicable Superfund sites, and EPA attorneys responsible for the legal aspects of settlements with the responsible parties. We also reviewed regional files on selected Superfund sites to determine the basis for decisions regarding certain site enforcement activities.

We analyzed the adequacy of EPA's cost recovery efforts by examining agency procedures and practices for recovering costs, including how it identifies and allocates indirect EPA costs to Superfund sites, and whether it issues timely demands for payment in cost recovery cases.

We evaluated EPA's framework for planning, managing, and overseeing the agency's Superfund enforcement program by reviewing, in particular, any agency strategies that provide long-term program goals and objectives. As stated in our July 19, 1988, report entitled Hazardous Waste: New Approach Needed to Manage the Resource Conservation and Recovery Act (GAO/RCED-88-115), goal setting and strategic planning is a first key step of any major undertaking.

We conducted our review between October 1987 and April 1989 in accordance with generally accepted government auditing standards. In addition, in preparing our report, we considered the findings and, where appropriate, included the recommendations contained in the EPA Administrator's June 1989 report ("90-day study"), A Management Review of the Superfund Program. We sought the views of EPA officials responsible for Superfund activities and incorporated their views into the report where appropriate. However, in keeping with the Chairman's request, we did not ask EPA to officially review and comment on this report.

EPA Needs to Do More to Improve PRP Searches

The PRP search is the cornerstone of EPA's Superfund enforcement program. If successful, this search identifies liable and financially viable PRPs responsible for the hazardous waste cleanup of a Superfund site. Establishing liability is essential to convincing PRPs to voluntarily undertake or pay for a site's cleanup or to convincing a federal court that such action should be ordered. However, EPA has found, and our questionnaire confirmed, that the PRP search process has had problems that jeopardize the success of EPA's Superfund enforcement efforts. Among other things, some PRP searches have been incomplete because of deficiencies in gathering information and, on contracted PRP searches, interviews have been poorly conducted because contractors have not had the necessary investigative skills.

While EPA has recently taken a number of actions to improve PRP searches, we identified other areas that EPA could strengthen to increase the likelihood that PRPs perform or pay for site cleanups. First, we found that additional policies and procedures are needed to better identify PRPs. Specifically, we found that EPA does not have policies or procedures to guide its regions in identifying previously completed but inadequate searches that should be redone. Furthermore, we believe more responsible parties could be identified if EPA were to provide a toll-free hot line telephone number, and publicize its availability, for the general public to report information on those responsible for the hazardous waste at any site.

Second, we found that the EPA regions need better systems to track and monitor their efforts to obtain evidence against PRPs through the use of information request letters and related follow-up activities. Without such systems, it is possible that some PRPs may have avoided detection and, in turn, responsibility for their share of a site's cleanup costs.

Finally, we found that EPA's regions were not fully complying with EPA search requirements. Specifically, PRP searches were not always completed sufficiently in advance of RI/FS starts to enable EPA to get PRPs involved early in the cleanup process. Additionally, in contracting for searches, EPA had not always used the financial assessment capabilities of its National Enforcement Investigations Center.

EPA Acts to Improve PRP Searches

According to our survey of EPA enforcement employees, 50 percent of the regional project manager and attorney respondents with a basis to judge (N=212) were generally or very dissatisfied with the thoroughness of the PRP searches they had used in the past year. Of the regional

project managers and attorneys having a basis to judge changes in the quality of searches (N=159), 48 percent responded that the quality of searches had improved over the last year. However, 48 percent also responded that the quality of searches had remained the same, while the remaining 4 percent indicated that the quality had decreased. Also concerned with the quality of PRP searches, OSWER initiated a four-phased evaluation of the search process in fiscal year 1988 to identify needed improvements.

Scope and Findings of OSWER's Review

OSWER's evaluation of the PRP search process included (1) an in-depth audit of 17 contracted PRP search reports, (2) an analysis of data on the timing of searches at 105 post-SARA NPL sites, (3) an analysis of the contents of 94 contract management files, and (4) interviews with 74 regional personnel. This evaluation resulted in suggestions for improvement, which were presented in a December 1988 memorandum to the regions, along with the interim findings, and the issuance of supplemental guidance in June 1989.

In its December 1988 memorandum, OSWER stated that its program evaluation had resulted in three major conclusions. First, consistent with EPA policy, PRP searches were being initiated sufficiently early in the process to ensure the opportunity for PRP participation in the RI/FS. Second, some PRP searches were incomplete because of deficiencies in information gathering and documentation.[1] For instance, many potential sources of documentation were being overlooked during the collection of records, and records were seldom collected from PRPs and other nongovernmental sources. In addition, interviews were poorly conducted because contractors did not have the investigative skills, the interviewing experience, and the knowledge of CERCLA liability necessary to conduct good interviews. Third, the PRP search work was not clearly focused on developing evidence and information on the liability of PRPs.

OSWER's Corrective Actions

In response to its findings, OSWER's December 1988 memorandum included several suggestions to its regions to help improve PRP search activities. These suggestions included, among other things,

- restructuring the content and format of PRP search reports to include more information on PRP liability and the amount of wastes contributed to a site;

[1]The OSWER evaluation did not specify the number of PRP searches with these deficiencies.

- issuing information request letters to both owners/operators and generators and transporters during the first 90 days of the search or immediately after completing the review of government files;
- following up on leads and incomplete or nonresponses to information request letters;
- hiring additional EPA civil investigators to manage PRP searches;
- focusing interviews, records collection, information requests, and title searches on gathering information that will help establish PRPs' liability;
- involving EPA's regional counsels more in the PRP search process, particularly PRP interviews, preparation of information requests, and review of evidence to ensure that all liability and financial viability questions are considered; and
- using qualified private investigators to conduct PRP interviews when the work load of EPA's civil investigators precludes them from working on the case.

In addition to these suggestions, the memorandum requested that EPA headquarters be provided with any PRP search strategies or procedures in use or with any proposed strategies. It also requested comments on the evaluation findings and suggestions contained therein. EPA used this information, together with its interim findings, to prepare supplemental guidance issued in June 1989.

The supplemental guidance states that a site-specific PRP search plan or strategy should be formulated for each PRP search. These plans are to identify the activities to be conducted, roles and responsibilities, scheduling, and information management. The supplemental guidance also discusses records collections, interviews with government officials, enforcement of noncompliance with information requests, the need for additional search activities, internal review of the initial PRP search report, follow-up activities in connection with preparing the final PRP search report, and the format and content of the search report.

According to an EPA enforcement official, EPA also held a 3-day training session, attended by over 100 persons who work for EPA or one of its PRP search contractors, in June 1989 to help improve the quality of its searches. The agency is considering repeating this training.

Additional Policies and Procedures Are Needed to Better Identify PRPs

While EPA's actions to improve PRP searches are commendable, our review showed that more could be done. Through fiscal year 1988, PRP searches have been completed at 895 sites, including non-NPL sites subject to removal actions. However, these searches have not always resulted in identifying liable or financially viable PRPs. For example, according to EPA data provided to a congressional committee in October 1988, searches at about one-third of the Superfund sites ready for cleanup at that time had not identified any liable and financially viable PRPs.

To the extent PRP searches are incomplete, EPA could be losing an opportunity to obtain response actions or cost recovery from PRPs. EPA has no policy or procedures for its regions to follow to identify incomplete searches that should be redone. Additionally, we found that EPA could further its efforts to identify liable and financially viable PRPs by providing the public with a toll-free hot line telephone number to report information on parties responsible for hazardous wastes at Superfund sites.

Some Previously Completed PRP Searches Need to Be Redone

Policies and procedures are needed to identify inadequate PRP searches that need to be redone. We found that 9 of EPA's 13 regional civil investigators have been involved in reviewing the files of previously completed searches to identify inadequate searches that may need to be redone—the remaining 4 had not been involved in this activity. But we also found that these reviews were sporadic. Six of the investigators told us that their reviews were based on random or selected referrals from other regional personnel. Two said that statute of limitations considerations were used in reviewing previously completed PRP searches.[2] But they also said they were given searches to review only a few months before the statute of limitations was to expire and that this time was insufficient to redo the search if needed. Both said that searches should be reviewed at least a year before the statute of limitations expires.

According to these nine regional civil investigators, many of the previously completed searches they reviewed were inadequate and therefore needed to be redone. They told us about the following examples:

[2]There are different statutes of limitations created by SARA for cost recovery. Generally, cost recovery must be initiated within 3 years from the completion of a fund-financed removal action and within 6 years from the start of a fund-financed remedial action.

- One 1986 PRP search of a Superfund landfill site had identified no liable and financially viable PRPs. Yet, the region's civil investigator said his recent review of regional files uncovered a notebook once belonging to the site's owner that contained information on the landfill site's customers. The region's civil investigator said none of the customers had ever been sent information request letters to establish their Superfund liability. With the site approaching the RI/FS, the region's civil investigator told us that the region was then trying to contact the identified customers to determine their willingness to conduct the cleanup work.
- A 1987 PRP search of another Superfund site also had identified no liable and financially viable PRPs. However, a recent review of EPA regional records by the region's civil investigator disclosed a bill linking a waste transporter to the site. In speaking with this transporter, the civil investigator determined that the transporter had shipped waste for several current financially viable companies to the site. EPA, however, had not sent information request letters either to the transporter or the companies the transporter identified. Because the site is approaching cleanup action, the civil investigator said the region is now contacting these PRPs to recover past Superfund costs spent on the site and to determine PRP willingness to undertake future cleanup work.
- A 1987 PRP search of a third Superfund site also had identified no liable and financially viable PRPs. Yet, a review of the PRP search report by the region's civil investigator found that no parties had been interviewed. Subsequent interviews by the investigator identified one current liable and financially viable PRP who, in turn, has since identified 27 other PRPs. With the site approaching cleanup action, the civil investigator said the region is negotiating with all 28 PRPs to do the work.

Despite regional civil investigators' knowledge of these and other similar cases, neither EPA's interim evaluation of the PRP search program nor its June 1989 supplemental guidance address the need to review previously completed searches to identify those that should be redone. According to EPA's civil investigator coordinator, OSWER is considering providing the region with policies and procedures for redoing searches and will include this project in its work schedule, if resources and priorities permit.

A Toll-Free Hot Line May Help Identify PRPs

To identify responsible parties, including the types and quantity of hazardous wastes they contributed, EPA's PRP search manual suggests several sources of information. These may include EPA's own records and files, those of the state or local government, and, to the extent known,

those of a PRP. In addition to these sources, EPA also maintains a community relations program to inform the general public about the nature of the site cleanup problem and allow them a chance to participate in cleanup decisions. As part of the program, EPA advertises a toll-free hot line telephone number connected with the National Response Center to report hazardous materials that present an imminent threat.[3]

As stated earlier, liable and financially viable PRPs have not been found for about one-third of the Superfund sites ready for cleanup in October 1988. In this respect, we believe more PRPs could be identified if EPA were to provide a toll-free hot line for the general public to report suspected PRPs involved at specific Superfund sites.

We discussed with EPA officials the merits of using a toll-free hot line number, including posting this number on site signs and otherwise publicizing its availability for reporting suspected PRPs. Twelve of the 13 EPA civil investigators and an OSWER division director agreed that the idea had merit. In addition, the Coast Guard commander in charge of the National Response Center said the Center would be ideally suited to take telephone calls so generated, inasmuch as it had already taken a few Superfund site calls. Additionally, an EPA enforcement official told us that one EPA region had tried something similar—it placed an advertisement in a local newspaper requesting individuals to call in information--for one of its Superfund sites, and it experienced considerable success with this effort.

A Management Information System Is Needed to Track Information Request Letters

Our review also showed that none of the three regions we reviewed had an adequate system to track information request letters and follow-up actions. Without the information such systems can provide on the status of its request letters and follow-up actions, EPA can not be assured that all appropriate actions have been taken to identify all liable and financially viable PRPs at Superfund sites. As a result, EPA could be inadvertently encouraging other PRPs to avoid responding to similar requests. While EPA recognizes the importance of, and currently has actions underway to, vigorously enforce its request letters, EPA needs to ensure that its regions have an adequate data system to track request letters.

[3]The National Response Center, operated by the U.S. Coast Guard, receives and evaluates reports of oil and hazardous substance releases into the environment and notifies the appropriate agency or agencies. The center can be contacted 24-hours a day, toll-free at (800) 424-8802.

Importance of Information Request Letters

During the PRP search, EPA can send information request letters to parties to obtain additional information on their involvement with a site. Documentation commonly requested, according to EPA guidance, includes details concerning waste operations and waste management practices, the types and amounts of substances contributed by each PRP, as well as the names of other PRPs that may have contributed substances to the site. Failure to respond could result in EPA's issuing a compliance order or subpoena and, if need be, initiating court action to enforce them.

According to EPA, vigorous enforcement of information requests serves several purposes. First, it allows EPA to obtain information useful in establishing PRP liability and helpful to PRPs in generating acceptable settlement offers. Second, such enforcement provides an opportunity for the government to pursue recalcitrant parties at an early stage, thereby encouraging them to participate in negotiations. In addition, PRPs are more willing to settle when they are assured that other parties are not escaping participation simply by ignoring EPA's requests.

Status of Information Systems

To effectively monitor its information request letter activities, EPA needs to have adequate data systems in place to (1) track request letters, responses, and subsequent follow-up actions and (2) provide it with summary reports on these activities. However, on the basis of our review in EPA Regions II, V, and IX, we found that only Region V had an overall system to track and monitor these activities. But even then we found that Region V's system was not complete or current. For the three sites we selected to test the region's tracking system, we found that the system was not used to track letters for two of the sites and that the system's data for the third site were out of date.[4]

With respect to the two sites not covered, one official told us that the tracking system was not used at one of the sites because the request letters could be tracked manually since there are only 14 PRPs. Another regional official explained that there are no written procedures on the number of PRPs that have to be sent letters before the tracking system is to be used. At the other site, which had nearly 400 PRPs, an official told us that the tracking system was not used because the system, which was not put into use until November 1986, had some problems that were still being worked out. Instead, this official stated that request letters and

[4]We limited our review to judgmentally selected sites in which information request letters were sent to at least 10 PRPs between February 1, 1987, and March 31, 1988.

responses were tracked manually, but even then not all PRP response data were centrally recorded.

For the third site for which system data had not been updated, one official told us that there is no specific time frame for updating the system's information. He said that the system is generally updated when about 50 percent of the responses have been received to the information request letters. In this case, we were told that the PRPs who had not responded or had responded inadequately to EPA's initial request were all sent follow-up letters and that all the PRPs had adequately responded to them. However, because the tracking system had not been updated to reflect these responses, we were not able to readily verify this information. In addition to lack of a specific time frame for updating the system's data, according to a regional official, the data were not being updated on a timely basis because there were a limited number of computer terminals.

At Regions II and IX, the tracking of information request letters was even less formalized than in Region V. Neither Region II nor IX had an overall regional tracking system, according to regional officials. Instead, these regions used a contractor's computer system to track selected request letters for selected sites—those with a large number of PRPs.

Region II officials defined a large number of PRPs as being 50 or more and provided us with computer printouts for three sites in which 50 or more information request letters had been sent. These printouts, however, showed that no responses had been received on letters sent for two of these sites. According to one regional official, responses had been received but were not reflected in the printouts because regional personnel are not required to enter response data into the system. Without such a requirement, there is no reasonable assurance that even the region's limited system is effective.

While Region IX also had no computer tracking system for request letters, a regional official said that the region considers using contractors for this activity when there are a large number of PRPs. We identified one case in Region IX that met our criteria—it had 10 or more PRPs. In that case, Region IX mailed 108 requests and received 91 responses. However, the mailing of request letters and the receipt of responses were tracked manually, according to the regional attorney on the case. Five responses were returned to the region as undeliverable, and 12 PRPs did not respond at all. In May 1988, the region concluded a settlement with 62 PRPs to conduct the RI/FS and to pay all past costs.

The regional attorney on this case told us that one of the nonrespondents was 1 of the top 10 generators of hazardous waste at the site. The official said this nonrespondent, which this official described as an ongoing business, apparently did not accept receipt of its information request letter. However, the region was then working on getting this PRP to respond to a new request letter with a view toward involving it in the site's cleanup.

EPA's Planned Actions

The EPA Administrator's June 1989 report states that there are some data to suggest that EPA does not vigorously enforce its information requests. To address this problem, the report states that EPA will develop specific goals and time lines to improve enforcement of these requests. Specifically, the agency will provide for the use of administrative orders and judicial referrals to compel answers and to secure civil penalties or criminal sanctions when appropriate. It will also provide for increased use of its subpoena authority. Additionally, the report states that EPA will encourage the creation of specialized regional units for enforcement support activities, such as PRP Search Units, to consist of civil/private investigators to conduct timely and thorough PRP searches and follow up with information requests. The report also acknowledges that these units must be adequately staffed to avoid bottlenecks and to be held accountable for meeting deadlines for expeditious enforcement action.

The report, however, does not specifically address the need to have adequate data systems to track and monitor information request letter activities. To one OECM official's knowledge, EPA does not know the extent to which its regions, if at all, are tracking and following up on information request letters. However, through informal contacts with the regions, the official verified that there is a problem in this area. As a result, the official has prepared a memorandum, which he expected to be issued in early October 1989, encouraging the regions to enforce information request letters and to develop a tracking system.[5] He also said that they will be taking affirmative action to ensure that each region has a system to track request letters. Specifically, they plan to ask each region to identify its tracking system and, where needed, help it develop such a system. Additionally, EPA's September 1989 plan for implementing the recommendations in the Administrator's June 1989

[5]Officials in Regions I and VI told us those regions are now in the process of developing a system to track information request letters as a result of our October 1988 interim report on Superfund enforcement.

report states that a strategy for tracking nonrespondents is to be implemented by January 1990.

Full Compliance With EPA Search Requirements Has Not Been Achieved

EPA guidance specifies the parameters for conducting a successful PRP search. It stipulates, in part, when the PRP search should be completed and that an EPA region conducting a PRP search should initially obtain the addresses of identified PRPs and then request a financial assessment of the PRPs by EPA's NEIC. Our analysis of EPA searches showed, however, that EPA regions have not fully complied with this guidance.

PRP Searches Have Not Always Been Completed on a Timely Basis

According to EPA guidance, the PRP search should be completed at least 90 days before the projected obligation of funds for an RI/FS.[6] Timely completion of the PRP search is essential to determine if PRPs are available to finance the RI/FS. PRPs participating in the RI/FS are generally more willing to finance the RD/RA. Conversely, a PRP search completed late means that, as likely as not, Superfund money will be used initially instead.

EPA data as of January 1989 indicate that PRP searches for 18 to 39 percent of the 279 sites proposed to the NPL since the enactment of SARA, had not been completed or were not scheduled to be completed on time—at least 90 days before the start of the RI/FS.[7] The 18-percent rate assumes that searches would be completed on time for 58 sites on which we were not able to obtain data on the PRP search completion date or the date of the RI/FS start. In contrast, the 39-percent rate assumes that the searches for all 58 sites were or will be late. Table 2.1 shows the extent to which searches were on time or late for the 221 sites on which we were able to obtain data for our analysis.

[6]EPA's June 1989 supplemental guidance on PRP searches states that an interim final search report should be available about 6 months before negotiations are to begin for the RI/FS. EPA refers to this report as an interim report because additional information may become available on new or existing PRPs after this report is prepared. For this reason, the PRP search will continue beyond this report until all reasonable leads have been exhausted or a settlement reached.

[7]Our analysis of the timely completion of PRP searches is based exclusively on data from EPA's Comprehensive Environmental Response, Compensation, and Liability Information System; the validity of this system's data is somewhat suspect, as noted in chapter 1.

Table 2.1: Timing of PRP Searches on Sites Proposed to the NPL Since SARA

Region	Total	Number of proposed NPL sites on which the PRP search was or is to be completed: On time[a]	Late[b]
I	18	18	0
II	19	7	12
III	46	35	11
IV	45	43	2
V	34	33	1
VI	18	17	1
VII	13	8	5
VIII	6	3	3
IX	15	5	10
X	7	1	6
Total	**221[c]**	**170**	**51**
Percent	100	77	23

[a]More than 90 days before RI/FS start.

[b]Less than 90 days before the RI/FS start or after the RI/FS start.

[c]Excludes 58 sites on which we were not able to obtain the PRP search completion date, the date for the RI/FS start, or both.

Source: EPA.

As the table shows, at least half of the PRP searches in Regions II, VIII, IX, and X were late or scheduled to be completed late. EPA officials in Regions II and IX—two regions we reviewed—offered us different explanations for this situation. For instance, a Region II official said that a staff turnover rate of about 35 percent has, in part, affected the conduct of PRP searches. A Region IX official said that, because of the scarcity of Superfund enforcement funds, the region does not know when or what type of PRP search will be done for certain Region IX sites, but the PRPs for those sites are already fairly well known. Additionally, an OSWER division director speculated that some late searches may be attributable to EPA regions initiating RI/FS starts sooner than planned to try to meet the agency's annual performance targets (see ch. 5) on the number of RI/FS starts.

Use of NEIC's Financial Assessment Capabilities

Financial assessments are conducted during the PRP search to determine the PRP's ability to finance the cleanup or to pay penalties. However, contrary to EPA guidance, EPA regions are making limited use of the financial assessment capability of EPA's NEIC. Additionally, because NEIC

is a central source of information on PRP financial assessments, greater use of it offers the opportunity to lower the cost of this activity by eliminating any unnecessary duplication in connection with PRPs who are involved at more than one hazardous waste site.

According to EPA's PRP search manual, PRP search contractors are to provide EPA with the company name and address for each PRP and then request NEIC to do a financial search. This Center, according to a NEIC official, is run by EPA personnel with contractor support. NEIC maintains and operates a computerized financial assessment system to assist EPA enforcement personnel in negotiating with PRPs. The system is designed to provide a concise financial evaluation of the company and calculate the amount of remedial action costs a company can afford to pay. When the company is publicly held, the system evaluates 3 to 5 years of annual data. When the company is privately held, NEIC can obtain brief financial data, such as annual sales, net worth, and net profit/loss.

Despite EPA guidance that regions use NEIC for financial research, NEIC data indicate that limited use has been made of NEIC's financial assessment capabilities. As shown in table 2.2, EPA completed considerably more searches during fiscal years 1987-88 relative to the number of sites on which NEIC provided financial assessments.

Table 2.2: Comparison of NEIC Regional Financial Assessments to PRP Search Completions

	Number of sites in fiscal year 1987 on which		Number of sites in fiscal year 1988 on which	
Region	NEIC did a financial assessment	A PRP search was completed	NEIC did a financial assessment	A PRP search was completed
I	7	5	7	12
II	3	22	2	22
III	7	32	2	3
IV	6	9	3	21
V	0	12	2	24
VI	2	7	0	17
VII	13	4	6	7
VIII	3	9	1	8
IX	3	10	1	5
X	0	4	3	2
Total	**44**	**114**	**27**	**121**

Note: The sites for which financial assessments were completed are not necessarily the same sites for which PRP searches were completed. Therefore, the number of sites for which assessments were completed could in some cases exceed the number of sites for which searches were completed.

Source: EPA

An NEIC official confirmed that limited use had been made of NEIC's financial assessment capabilities. The official was not sure that the regions are required to contact NEIC each time there is a PRP search. However, the official stated that it would be a good idea to include provisions in each work assignment issued to a contractor initiating a PRP search to require the contractor to consult with NEIC for financial assessment assistance. In this respect, OSWER's PRP search evaluation had found that the work assignments for 86 of the 98 contracted searches reviewed did not contain provisions that the contractor use NEIC for financial research.

To determine whether NEIC could provide the same financial data contractors were being asked to provide, we selected four PRP searches and asked NEIC officials if they could have provided the requested data. An NEIC official told us that the Center could have supplied at least some of the data on all four of the searches. In fact, the official told us that NEIC had supplied data on two of these four searches.

EPA's civil investigator coordinator told us there are advantages to using the services of NEIC. He said a central source of information, like NEIC, could eliminate the possibility of duplicating financial assessments on PRPs liable at more than one Superfund site. In addition, updating changing PRP financial information by using NEIC's computerized assessment system would be simpler than if the information were not computer-generated. On the other hand, this official said that EPA may need more information for specific sites than NEIC alone can provide, and therefore EPA or its search contractors would still have to obtain this information from other sources.

Conclusions

Recognizing that the quality of PRP searches can be improved, EPA has taken positive actions and has others planned to improve PRP searches. But more can be done. EPA's regions have been sporadic in their efforts to identify previously completed but inadequate searches that should be redone lest EPA lose an opportunity to have PRPs perform or pay for a site's cleanup. The regions were sporadic in identifying inadequate searches that need to be redone because EPA has not provided them with policies and procedures for carrying out this activity.

Additionally, we believe EPA could further enhance its capabilities to identify liable and financially viable PRPs if it were to provide a toll-free hot line telephone number for the public to report on PRPs suspected of

being involved at specific waste sites. Most EPA officials we interviewed agreed that this hot line was a good idea.

EPA recognizes that it has not vigorously enforced its requests for information from PRPs. However, the full extent of this problem is unknown because adequate information systems have not been in place in all EPA regions to track these activities and to provide management with summary information with which to monitor this activity. EPA plans to vigorously enforce its information requests, and it has recommended that its regions establish adequate/appropriate tracking systems. EPA has plans for assisting its regions in developing a system to track request letter activities and also plans to implement a strategy for tracking nonrespondents. If properly implemented, these actions should provide EPA with the information it needs to effectively monitor this activity.

Contrary to EPA guidance, PRP searches have not always been completed in a timely manner, thereby impairing EPA's ability to get PRPs involved early in the cleanup process. At two regions we reviewed, delays occurred, in part, because of employee turnover and the scarcity of enforcement funds. To improve its PRP search process, EPA plans to set up special PRP search units in each region. However, as EPA acknowledges, these units will have to be staffed adequately to avoid bottlenecks and held accountable for meeting deadlines. Chapter 5 discusses resource requirements for the Superfund enforcement program and the need for better program measures to strengthen accountability.

As an EPA official also indicated, some searches may have been completed late because the RI/FSs were started earlier than planned in an effort to meet agency targets for this activity. While we support the expeditious initiation of RI/FSs, the advantages of completing searches before the start of the RI/FS also should not be overlooked. The timely completion of PRP searches increases the likelihood of getting PRPs more involved in the RI/FS and subsequent cleanup action, thereby allowing limited Superfund money to be used at other sites.

Full use was not made of NEIC's financial research and assessment capabilities despite EPA guidance stating that NEIC should be routinely used. NEIC has the potential to lower the cost of PRP searches by eliminating the duplication of work that can occur when assessments are done on the same PRPs because of their involvement at multiple sites. It is also a source of information for readily updating the financial status of PRPs. In light of these potential benefits, EPA could find it more economical and

effective to maximize its use of NEIC for financial research and assessments.

Recommendations to the Administrator, EPA

To further improve the PRP search process, we recommend that the Administrator, EPA,

- provide its regions with criteria (policies and procedures) for identifying previously completed (older) PRP searches that should be redone, and set up controls to ensure that those identified as such are redone;
- provide a toll-free hot line telephone number for the general public to use to report the identity of PRPs suspected of being involved at hazardous waste sites and freely publicize its availability;
- ensure that its regions have an adequate information system in place for tracking and monitoring information request letter activities; and
- determine whether NEIC is more economical and effective than PRP search contractors in providing financial research and assessments and, if so, seek ways to optimize the use of this resource.

Timely and Effective Enforcement Is Needed to Obtain Cleanups From Responsible Parties

Although EPA relies primarily on negotiations to obtain PRP response actions, EPA regions have not been complying with agency guidance for beginning, continuing, and completing negotiations for site cleanups. Special notice letters (SNL), which are sent to PRPs to begin formal negotiations, are being issued late, and negotiations have taken longer than EPA expects for this process. This noncompliance has the effect of delaying the cleanup of affected sites.

While we found that longer negotiation periods may be needed, we also noted that EPA was not making full use of its section 106 enforcement authorities to strengthen its negotiation posture. Section 106's requirement that there be an "imminent and substantial endangerment" to the public health, welfare, or the environment before these authorities can be used was the most prevalent reason section 106 authorities were not used, according to regional project managers and attorneys. Additionally, we found that other tools available to EPA to facilitate settlements—SARA's mixed funding and de minimis provisions—were also seldom used.

EPA's June 1989 report recognizes that EPA has had problems in these areas. Several actions are now underway or planned that, if properly implemented, should help improve EPA's performance in these areas.

Noncompliance With Negotiation Requirements

In initiating negotiations for remedial design and remedial action (RD/RA), EPA requires SNLs to be issued no later than when the cleanup remedy is selected. SNLs, however, were issued later than this date at 42 of the 74 sites we reviewed nationwide. The range of lateness was from 1 day to about 2.5 years. The average (median) was 2 months. Similarly, EPA's procedures attempt to limit RD/RA negotiations to less than 180 days, but at 18 of the sites we reviewed, negotiations had exceeded this period by 3 days to up to about 8 months, with an average (median) of 2 months. According to regional project managers and attorneys, one of the most important factors that contributed to lengthy RD/RA negotiations was the number and complexity of the issues to be addressed, but EPA's pre-negotiation preparation also contributed to prolonged negotiations. To a lesser extent, staffing work loads were cited as contributing to lengthy negotiations, and limited staff resources was cited as a factor in the late issuance of SNLs.

Negotiation Requirements

To begin RD/RA negotiations, EPA issues an SNL to each PRP at a site. Among other things, this SNL discusses the purpose of the notice letter,

the response activities to be conducted, the moratorium on EPA's conduct of the response action during negotiations, what constitutes a "good faith" proposal to trigger this moratorium, and a deadline for PRPs to notify EPA of their interest in participating in negotiations. The SNL also provides the names and addresses of other PRPs and, if possible, a draft consent decree (agreement) and demands that PRPs reimburse EPA for its past costs in conducting response activities at the site.

Section 122(e) of CERCLA, which was added by SARA, authorizes EPA to provide PRPs with special notices when EPA determines that a period of negotiations would facilitate an agreement with PRPs and would expedite the remedial action. By law, these special notices create a 120-day moratorium in which EPA is precluded from (1) financing the remedial action but not the remedial design or (2) taking enforcement action under section 106. However, this 120-day moratorium is conditioned on EPA's receipt of a "good faith" proposal from the PRP within 60 days of receiving such notice. Without such a proposal, the moratorium expires, and EPA can either finance the remedial action from Superfund or obtain a PRP response through its enforcement authorities.

In "Interim Guidance: Streamlining the CERCLA Settlement Decision Process," issued in February 1987, EPA stated that this initial 120-day period should generally be sufficient to conclude negotiations or, at a minimum, resolve all major issues, provided adequate preparation preceded SNL issuance. While the guidance states that extensions beyond these periods are not to be encouraged, it authorized regional administrators to extend negotiations an additional 30 days (to a total of 150 days). Extensions beyond this, however, require the approval of the Assistant Administrator, OSWER. Requests for this approval are to be in writing and include a justification for the extension. According to the guidance, extensions will be granted only in "rare and extraordinary" circumstances and generally for "short duration" where the expectation is that final agreement is imminent. Absent this approval, the regions are expected either to initiate the response action with Superfund financing or to move forward with an enforcement action.

EPA's initial guidance for implementing SARA stated that SNLs for RD/RA negotiations should generally be issued as early as possible, but no later then when EPA has identified a "preferred" remedy. Subsequent guidance, issued in October 1987, identifies three points when the regions can issue SNLs for RD/RA negotiations. They are, from earliest to latest,

- prior to the release of the draft feasibility study and proposed cleanup plan for public comment;
- when the draft feasibility study and proposed cleanup plan are released for public comment; or
- when the decision is made on the cleanup remedy, specifically when the record of decision is signed.

EPA's guidance states that the timing of SNLs for RD/RA negotiations has a significant impact on both the success of the negotiations and EPA's ability to move forward without delay with the site's cleanup. For this reason, the guidance states that the regions generally must issue SNLs concurrent with release of the draft feasibility study and cleanup plan for public comment. EPA stated that this approach provides a proper balance between EPA's ability to conduct meaningful negotiations, minimizing delays in cleaning up the site and maintaining the integrity of the public participation process.

Issuing an SNL for RD/RA negotiations prior to release of the feasibility study was considered inappropriate in many cases because of the uncertainty of the remedy, but it was included to cover situations with relatively small numbers of PRPs and where the remedy was certain. Issuance of the SNL at the time the record of decision is signed was to be chosen in only limited circumstances—for example, very complex sites or where large numbers of PRPs were involved. EPA takes this approach because any ensuing negotiations would not be concurrent with any other site activities, thereby creating the greatest potential for delays in implementing the remedy.

SNLs for RD/RA Negotiations Issued Late

As shown in table 3.1, the SNLs that EPA's regions issued to begin RD/RA negotiations were issued late at 42 of the 74 sites nationwide for which EPA had issued SNLs between February 1987, when EPA issued guidance to implement related SARA provisions, and the end of fiscal year 1988. At these 42 sites, SNLs were issued from 1 day to about 2.5 years after the record of decision was signed. The average (median) was about 2 months. As noted earlier, the record of decision is the latest date provided for by EPA guidance for issuing these SNLs. This late issuance of SNLs had the effect of delaying the remedial design phase at 33 of the 42 sites.[1]

[1]Remedial designs were initiated before or during negotiations at only 9 of the 42 sites. Remedial designs were started before the negotiations at five of the nine sites, possibly in response to earlier but unsuccessful negotiations.

Table 3.1: Issuance of SNLs for RD/RA Negotiations by Region Through Fiscal Year 1988

Region	Number of sites at which SNLs were issued	
	On time[a]	Late[b]
I	0	1
II	1	11
III	6	6
IV	2	6
V	15	1
VI	1	11
VII	1	1
VIII	1	0
IX	4	2
X	1	3
Total	**32**	**42**

[a]Before the record of decision was signed.

[b]After the record of decision was signed.

Source: EPA's Comprehensive Environmental Response, Compensation, and Liability Information System.

Regions II and VI had the greatest number of sites at which SNLs were issued late; however, of these two regions, we visited only Region II. According to the former Region II official who was responsible for overseeing the activities at these sites during the period of our review, SNLs were issued late because of staff time pressures. He said the staff had too many responsibilities to effectively deal with getting the SNLs out on a timely basis. In addition, he said the region was severely hurt by staff turnover. He explained that there was a tendency in the region to issue a lot of records of decision in the last month of the fiscal year, apparently to meet EPA's program expectations (targets) for records of decision, and that this volume of work made it difficult for the enforcement staff to expeditiously issue SNLs.

SNLs were issued late at 3 of the 22 sites reviewed in the other two regions visited. Of the six sites reviewed in Region IX, two had SNLs that were issued late. According to Region IX officials, SNLs were issued late at these two sites because the staff was busy completing the record of decision for each site and other resources were not available to prepare the SNLs for mailing. At the one site in Region V where SNLs where issued late, officials told us they deliberately delayed issuing the SNLs until after the record of decision because they knew that the remedy would be disputed.

Negotiations Exceed Allowed Time Frames

EPA regions have been somewhat successful in limiting negotiations for site cleanups to 180 days or less, but room for improvement exists.[2] As shown in table 3.2, negotiations at 18 of the 73 sites[3] we reviewed nationwide had exceeded 180 days by 3 days to about 8 months with the average (median) being about 2 months. These data include six sites at which negotiations were still ongoing as of September 30, 1988. As the table also shows, negotiations were more likely to exceed 180 days in cases in which settlements were reached—11 of the 23 cases on which settlements were reached exceeded 180 days—than in the other cases reviewed.

Table 3.2: Status of RD/RA Negotiations as of September 30, 1988, for Sites Covered by SNLs

Outcome of negotiations	Number of sites with negotiation time frames		Total sites reviewed
	Within 180 days	Over 180 days	
Settlement reached	12	11	23
Terminated without settlement	27	1	28
Ongoing	16	6	22
Total	**55**	**18**	**73**

Source: EPA quarterly reports from the regions and EPA's Comprehensive Environmental Response, Compensation, and Liability Information System

Because lengthy and inconclusive negotiations delay the remedial design phase, they also delay site cleanups. In this respect, EPA recognizes that it has the authority to use Superfund money to start the remedial design during the negotiation moratorium—section 122(e) specifically excluded this activity from the moratorium. Nonetheless, EPA's guidance on SNLs states that as a general rule EPA will not take such action during negotiations. In fact, we found that Regions V and IX had few or no funds budgeted for remedial designs for enforcement cases. Only Region V had any budgeted funds for enforcement cases; there, three enforcement sites had remedial designs budgeted for fiscal years 1987-88. Neither region has funds budgeted for remedial designs at enforcement sites for fiscal year 1989.

Table 3.3 shows several major reasons RD/RA negotiations can take longer than the time EPA allows. The table is based on questionnaire

[2]Includes the initial 120-day moratorium, one 30-day extension by the regional administrator, and an additional 30-day extension by the Assistant Administrator, OSWER. While EPA's guidance does not specifically limit Assistant Administrator extensions, we allowed for only a 30-day extension since EPA's guidance states that such extensions will be granted in "rare and extraordinary circumstances" and "generally be for short duration."

[3]Excludes one site at which negotiations were placed on hold pending data validation.

responses from regional project managers and attorneys who indicated that they had moderate to extensive experience in these negotiations.

Table 3.3: Factors Contributing to Lengthy RD/RA Negotiations (Responses in Percent)

Factors	Number of respondents	Extent explains lengthy negotiations: Greatly to totally	Moderately	Somewhat to not at all
Number/complexity of issues to be settled (too many, too complex)	110	67	21	12
Number of PRPs (too many) and/or PRPs were not organized	108	56	18	26
Disagreements among PRPs	108	48	30	22
Size of EPA staff work loads	109	42	38	20
Total cost of the cleanup remedy (too costly)	102	41	29	30
PRPs pursue tactics to delay the progress of negotiations	109	38	38	24

Note: The number of respondents represents the subset of respondents who have a basis to judge from among the universe of regional project managers and attorneys who indicated that they had moderate to extensive experience in RD/RA negotiations (N=115). The percent of respondents is for this subset of respondents having a basis to judge.

While the number and complexity of the issues to be resolved during the negotiations was the most notable factor in explaining lengthy negotiations, 43 percent of the project managers and attorneys responding to our questionnaire, who indicated that they had moderate to extensive experience in negotiating site cleanups, believed that EPA's time frame for RD/RA negotiations was probably or definitely too short. This response rate is considerably greater than the 18 percent who responded that the time EPA allows was probably or definitely too long. While this response rate suggests that negotiation time frames are unrealistic and may need to be increased, as discussed later in this chapter, EPA has not fully used its section 106 enforcement authorities to strengthen its negotiation posture to bring about quicker settlements.

Role of Pre-Negotiation Preparation in Lengthy Negotiations

Only 13 percent of the regional project manager and attorney respondents experienced in RD/RA negotiations and having a basis to judge (N=109) believed that "less than adequate preparation by EPA" greatly or totally explained why it can take longer to negotiate site cleanups than the time allowed by EPA. In fact, 68 percent of these respondents believed that this factor only hardly or somewhat contributed to lengthy

negotiations. However, respondents may have been somewhat reluctant to cite "less than adequate preparation by EPA," which implies a negative characteristic/quality of EPA employees. However, we found that EPA's regions did not always prepare written strategies—as provided for in EPA guidance—to guide RD/RA negotiations. Additionally, we found that PRPs were also not always prepared for negotiations—our questionnaire responses also bear this out—and that EPA had not done all it could have to help PRPs to prepare. We believe these factors were also reasons negotiations took longer than the 180 days EPA allows.

Negotiation Strategies

Regarding the management of negotiation deadlines, EPA's February 1987 "Interim Guidance: Streamlining the CERCLA Settlement Decision Process" states that the regions should prepare a negotiation strategy for each site for regional management review. The negotiation strategy is to include (1) initial positions on major issues with alternative and bottom-line positions or statements of settlement objectives, (2) a negotiation schedule identifying the deadline for negotiations and interim milestones to evaluate the progress of negotiations, and (3) a strategy and schedule for action against PRPs in the event negotiations fail.

Our review at Regions II, V, and IX showed that written negotiation strategies were not routinely prepared as required by the February 1987 guidance. Region V officials told us that in the absence of written strategies, they entered negotiations without a clear settlement strategy and that this approach had the effect of extending negotiation time frames. For example:

- At one site Region V officials spent 4 months negotiating changes in the remedy, only to decide not to change the original remedy. At the time of our review, negotiations at this site had been ongoing for 399 days.
- At another site, the PRPs proposed a mixed-funding settlement, but the region was not fully prepared to deal with this proposal because mixed funding had not been considered an option going into negotiations. Regional management wanted to pursue mixed funding, but, as an alternative, the project staff wanted to waive past costs and provide the PRPs 30 days more to settle. Other delays were due to preparation and review of documents needed for a mixed-funding settlement—this was the region's first such settlement—and modification of the settlement agreement to account for a new agreement between the city and PRPs. At the time our review, negotiations on this site had been ongoing for 413 days.

On August 17, 1988, EPA issued draft guidance on pre-referral negotiation procedures that provides for the regions to prepare mini-litigation

reports for EPA headquarters and Justice to involve them in case planning and management activities. As subsequently revised in April 1989, the draft guidance states that these reports are to contain the elements of a negotiation strategy, and they are to be provided to the Department of Justice (which may be called on to pursue judicial action should negotiations fail) 60 days before SNLs for RD/RA negotiations are issued. Final guidance is expected to be issued in December 1989.

The EPA Administrator's June 1989 report reiterates that the regions will institute a case management planning process that will include provisions for coordination among the different offices and organizations at critical stages in the enforcement process. Additionally, it states that EPA, in consultation with Justice, will establish a single time line for the remedial program that sets out expected time frames and results for each critical stage of the enforcement and remedial process. Under EPA's September 1989 plan for implementing the report's recommendations, case management planning activities were to be completed by June 1990 and time line activities were to be completed by May 1990.

PRP Preparations

PRPs also must be prepared to negotiate. However, two of the factors cited by experienced regional project managers and attorneys—the number and/or disorganization of PRPs and disagreements among PRPs—tend to suggest that PRPs also were not fully prepared for RD/RA negotiations.

Concerning PRP preparedness, EPA's February 1987 guidance on streamlining the settlement process recognizes that EPA has a responsibility to prepare PRPs for negotiations and that its success in negotiations is affected by the extent to which PRPs have the time and information to organize themselves. Accordingly, this guidance encourages the regions to (1) help PRPs organize themselves by notifying them of their potential liability and providing them with information on the names of other PRPs, together with the volume of waste contributed, and (2) initiate discussions with PRPs early in the process to educate them about the site, EPA's approach to it, and the information EPA has that may bear on allocation of cleanup costs among PRPs.

The allocation of cleanup costs among PRPs can be a major area of disagreement. At one site we reviewed in Region IX, disagreements among PRPs over allocating cost, together with a disagreement between EPA and PRPs over penalties, delayed settlement for 239 days. EPA, however, has made little use of its authority to assist PRPs in allocating costs.

To help expedite settlements, SARA added section 122(e)(3) to CERCLA to authorize EPA to provide a nonbinding preliminary allocation of responsibility, which allocates percentages of the total cleanup costs among PRPs. EPA's May 1987 guidance for preparing these allocation documents states that the documents would be useful where there are large numbers of PRPs and that their preparation may even help unite a previously unorganized PRP group.

In October 1988, EPA reported that it had used this tool only once. We noted, however, that EPA's May 1987 guidance on preparing these allocation documents states that particular consideration will be given to preparing them whenever a significant percentage of PRPs at a site request one. But this guidance also reflects the fact that EPA expected there would be few of these requests from PRPs. According to an EPA Superfund official, PRPs do not want EPA involved in the allocation process.

Recent EPA Actions

The EPA Administrator's June 1989 report states that EPA will establish a single, integrated time line for both enforcement and Superfund-financed activities. The time line will include deadlines for completing negotiations and following up with enforcement or response action. The time line will also reflect program goals for completing phases of the response action and serve as a benchmark for assessing progress at sites. According to EPA's September 1989 plan for implementing the report's recommendations, this time line is to be completed by May 1990. If adhered to, this time line should help ensure the timeliness of Superfund enforcement activities.

Section 106 Enforcement Authorities Not Fully Used

EPA could make more use of its most powerful enforcement tool—section 106 unilateral administrative orders (orders)—to obtain PRP cleanups.[4] While EPA has been quite successful in obtaining compliance with the orders it has issued for PRP performance of RD/RAs, it has seldom used such orders to bring lengthy RD/RA negotiations to closure. Further, orders and/or section 106 referrals to Justice (referrals) were not fully used to obtain PRP cleanups when RD/RA negotiations failed.

According to regional project managers and attorneys responding to our questionnaire, the "imminent and substantial endangerment" requirement applicable to section 106 actions may have limited the use of

[4]Unilateral administrative orders are those that EPA issues unilaterally to PRPs at a site.

orders and referrals to Justice. Other factors that may have limited the use of orders or referrals included (1) a weak case against PRPs and (2) EPA's limited financial and staff resources.

EPA's Experience Using Orders

For the most part, EPA has been successful in obtaining compliance with the orders it has issued for site cleanups. Between the enactment of SARA in October 1986 and the end of fiscal year 1988, EPA issued 18 such orders. As of September 7, 1989, action on one order had been suspended. However, compliance or settlements had been obtained on 14, or 82 percent, of the remaining 17 orders. Of the three orders not in compliance, EPA had referred two to Justice for legal action; no referral had been made on the remaining case as of September 7, 1989.

Although it experienced an 82-percent compliance rate with its orders, EPA seldom used them to help bring lengthy negotiations to a close. Of the 73 sites in our review, 18 had negotiations exceeding 180 days, but EPA issued orders at only 2 of these sites in an effort to bring these lengthy negotiations to a close. Both sites were in Region IX, and at both the orders were followed shortly by settlements. For example, an order issued 228 days into negotiations at one site was followed by a settlement 11 days later. In October 1988, the Assistant Administrator, OSWER, stated that innovative approaches, like the issuance of orders during negotiations, had resulted in a number of settlements in fiscal year 1988.

Additionally, orders and referrals were not routinely used to obtain PRP cleanups when negotiations failed to produce a settlement. As shown in table 3.2, negotiations at 28 of the 73 sites we reviewed were terminated without settlement. However, orders were issued or a referral made to Justice to compel a PRP cleanup at only 6 of these 28 sites. The cleanups at 22 of the 28 sites were left to be financed from Superfund.

As shown in table 3.4, most regional project manager and attorney respondents had only some to little or no experience in using orders or referrals, which alone suggest that limited use has been made of these tools. However, as the table also shows, most regional project manager and attorney respondents, while generally perceiving orders and referrals to be useful, believed EPA had underutilized each of these tools. In fact, those who considered these tools underutilized far exceeded those who considered them overutilized.

Table 3.4: Respondent Experience With, and Use and Usefulness of, Section 106 Orders and Referrals

	Orders		Referrals	
Category/response	Number of respondents	Percent	Number of respondents	Percent
Experience with tool				
Great to extensive	70	27	33	13
Moderate	53	21	36	14
Some to little or none	131	52	185	73
Use of tool				
Somewhat to greatly overutilized	8	4	15	10
Appropriately utilized	72	38	60	39
Somewhat to greatly underutilized	110	58	78	51
Usefulness of tool				
Very to extremely useful	123	66	64	45
Moderately useful	38	20	31	22
Somewhat useful to little or no use	26	14	46	33

Note: The total number of respondents for each category, e.g., experience with tool, represents the subset of respondents who have a basis to judge from among the 255 regional project managers and attorneys responding to our questionnaire.

Table 3.5 shows the factors identified most often by experienced project managers and attorneys as to why EPA may have used orders and referrals less frequently than it could have. Weak evidence of an "imminent and substantial endangerment" was identified more often as an important reason for not using orders while "urgent need for site cleanup" was most often identified as a reason for not using referrals. The litigation resulting from a referral to Justice can go on for years, thereby delaying cleanup. Therefore, when there is an urgent need for site cleanup, EPA's financing of the cleanup from Superfund would be more expedient than litigation. This time-pressure concern (urgent need for cleanup) was also a factor believed to contribute to the less frequent use of orders since noncompliance with an order also can result in a referral and ensuing litigation.

Table 3.5: Important Factors That Contributed to the Less Frequent Use of Section 106 Orders and Referrals

	Very greatly or greatly explains why			
	Orders may have been used less frequently		Referrals may have been used less frequently	
Reason[a]	Number of respondents	Percent	Number of respondents	Percent
Weak evidence of an imminent and substantial endangerment	25	25	19	25
Too weak a case against PRPs	22	22	22	29
Need for cleanup too urgent to wait for litigation	21	21	31	39
Limited financial or staff resources/low priority	22	21	27	34
Potential payoff of using this is low or negative	[b]	[b]	18	23

[a]Only those reasons cited by at least 20 percent of the respondents who have a basis to judge are shown

[b]Less than 20 percent of those with a basis to judge cited this factor

Note: The number and percentage is for the subset of respondents who have a basis to judge from among the universe of respondents who indicated that they had (1) moderate to extensive experience using orders (N=123) or (2) some to extensive experience with referrals (N=102)

Two other factors frequently identified as explaining why orders and referrals to Justice were not used more often were that (1) the case against PRPs was considered too weak and (2) financial/staff resources were limited and/or management gave a low priority to the use of this tool. The former could be, but not necessarily is, a reflection of the quality of EPA's search activities, which has been a problem for EPA (see ch. 2). The latter issue is discussed in more detail in chapter 5.

Of the 22 RD/RA negotiations we reviewed in Regions V and IX, we identified 6 cases at the time of our visits in which negotiations either had broken down and EPA was proceeding with the cleanup under Superfund (3 cases) or had exceeded 180 days (3 cases). For each case, we asked why orders had not been used. At two of the six sites, orders were not issued because the regional site attorney questioned whether EPA could show that there was an imminent and substantial endangerment to the public health, welfare, or the environment. There also was some concern at these two sites over either the liability or financial viability of the PRPs. According to EPA officials, orders were not used at the other four sites because of (1) the large number and makeup of PRPs at one site, (2) outside pressures over the selected remedy, (3) the need to complete the remedial design work and perform additional site investigations to confirm the remedy at the third site, and (4) the bankruptcy of one major PRP and the questionable viability of other PRPs at the fourth site.

Imminent and Substantial Endangerment

Although CERCLA limits EPA's authority under section 106 to cases in which EPA determines that an "imminent and substantial endangerment" exists, CERCLA does not define this term, and no clear guidance is provided by its legislative history. While case law provides some guidance, the courts have not been consistent in how they interpret this term. This lack of consistency, together with concerns over the adequacy of documenting that an "imminent and substantial endangerment" exists, can have a limiting effect on the use of section 106's enforcement tools. EPA and Justice officials with whom we discussed this requirement agreed that it was a barrier to use of section 106.

The courts in some cases have interpreted "imminent and substantial endangerment" liberally.[5] For example, some courts have ruled that the term "endangerment" does not mean actual harm, but a threatened or potential harm. The endangerment is "imminent" if the factors giving rise to it are present, even though the harm may not be realized for years. The endangerment is "substantial" if there is a reasonable cause for concern that someone or something may be exposed to a risk of harm by a release or threatened release of a hazardous substance if cleanup action is not taken.

Contrary to this liberal interpretation, the courts in several cases have held that section 106 actions are limited to emergency situations. For example, one court stated that "Congress intended Section 106(a) to be used in emergency situations where hazardous waste was currently being discharged or threatened to be discharged . . . and where such discharge could be stopped by an injunction."[6] Under this interpretation, EPA might find it difficult to support a finding of an "imminent and substantial endangerment" when EPA had been aware for years that hazardous conditions existed at a site.

In either case, EPA must establish a record to support a finding that an imminent and substantial endangerment exists. EPA's guidance states that its attorneys should go forward with a section 106 action only where they have established a strong administrative record showing imminent and substantial endangerment. Such a record would consist of documentary, testimonial, and physical evidence, such as endangerment or risk assessments, obtained through investigations and inspections. Accordingly, concerns over the adequacy of this documentation could

[5]See, e.g., United States v. Conservation Chemical Co., 619 F. Supp. 162 (W.D. Mo. 1985).

[6]United States v. Wade, 546 F. Supp. 785, 794 (E.D. Pa. 1982).

separately, or together with other reasons, result in a decision not to use this tool on a individual case.

In contrast, EPA can clean up a site under section 104 with money from Superfund and then take a cost recovery action against PRPs under section 107, thereby accomplishing the same objective as it can under section 106—having the PRPs pay for site cleanup—without ever having to show that there is an imminent and substantial endangerment. EPA, however, cannot rely exclusively on sections 104 and 107 to accomplish the task at hand. As noted in chapter 1, the current funding authorization for Superfund is not sufficient to clean up even half of the sites already identified, even when assuming that half of the work will be done directly by PRPs. Accordingly, EPA's enforcement authorities are an essential ingredient if EPA is to maximize its efforts to clean up Superfund sites. We therefore believe EPA must have, to the extent practical, an enforcement program that is free of unnecessary impediments or obstacles.

Besides the respondents to our questionnaire, a senior Justice official agreed that the "imminent and substantial endangerment" requirement was a barrier to the use of section 106's enforcement authorities. Furthermore, the official could see no reason to retain, or no objections to deleting, this requirement. In this respect, the official noted that section 3008(h) of the Resource Conservation and Recovery Act provides for the issuance of corrective action orders to clean up hazardous waste and penalties for noncompliance; yet, unlike section 106, this act requires simply a showing that there has been a release of a hazardous waste into the environment. An EPA enforcement official also agreed there may be some merit to relaxing or eliminating this requirement.

EPA Efforts to Increase the Use of Section 106 Authorities

In June 1988 hearings, the Assistant Administrator, OSWER, acknowledged that EPA had not done enough in the area of unilateral administrative orders.[7] In response to related congressional inquiries, EPA stated in October 1988 that it had taken several steps to ensure that additional orders for site cleanups are issued.

First, beginning in fiscal year 1989, the issuance of orders that are later complied with will count toward a new EPA Strategic Planning and Management System target—"section 106 referrals to Justice," thus creating

[7]Hearings before the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, Washington, D.C., June 20, 1988.

a new management incentive for the issuance of orders. This system, particularly its targets, has been an effective force for driving EPA's work.[8] Second, EPA regional and headquarters officials endorsed the increased use of orders in a May 1988 conference. Regional participants also exchanged experiences and successful approaches on the use of orders. Third, EPA plans to issue additional guidance for its regions on the use of orders in February 1990.

The EPA Administrator's June 1989 report states that EPA will increase its use of unilateral administrative orders, particularly for remedial design and remedial action. Specifically, the report states that EPA will encourage or compel PRPs to conduct the response action at all sites with viable PRPs before using Superfund, except in emergencies. In this respect, EPA will routinely issue orders to PRPs if settlement is not reached after completion of negotiations. In fact, before a Superfund-financed response can proceed at a site, the report states that the region must issue an order, or provide a justification for its decision not to do so.

In instances of noncompliance, the report states that the regions should have the flexibility to determine, in consultation with EPA headquarters, whether to proceed with a Superfund-financed response or judicial enforcement action to compel compliance and exact penalties. In determining whether to enforce the order, EPA will consider the importance of maintaining section 106 judicial enforcement as a credible threat to PRPs, as well as the availability of funds for an agency response. Where Superfund is used, EPA expects to pursue cost recovery actions under section 107 and to seek treble damages where appropriate.

While acknowledging that judicial actions are time-consuming and resource-intensive, the report states that such actions may become somewhat less demanding because remedy decisions and determinations of "imminent and substantial endangerment" can be defended on the basis of an administrative record, rather than by expert witnesses.[9] Nevertheless, the report states that increases in the number of judicial enforcement actions will increase demands on the Agency's staff and that EPA should be prepared to experiment with a number of mechanisms, for example, establishing a litigation budget to set aside dollars and staff resources to support these actions.

[8]EPA's Strategic Planning and Management System is discussed in more detail in ch. 5.

[9]In amending CERCLA in 1986, section 113(j) was added to generally limit the judicial review of any issues concerning the adequacy of any response action taken or ordered to the administrative record.

According to EPA's September 1989 plan for implementing the recommendations of the June 1989 report, EPA's actions for increasing the use of orders are scheduled to be completed by May 1990.

EPA's Limited Use of Mixed-Funding and De Minimis Settlements

Although EPA guidance recognizes the importance of mixed-funding (joint EPA/PRP financing) and de minimis (minor contributors) settlements in the enforcement process, EPA has used these tools in few settlements since SARA explicitly authorized them in October 1986. Additionally, our questionnaire results showed that EPA's regional project managers and attorneys considered these tools to be underutilized. While these officials identified several reasons that may have contributed to the less frequent use of mixed-funding and de minimis settlements, two important reasons common to both were (1) limited staff training and experience and (2) limited financial/staff resources or low priority.

Importance of Mixed-Funding and De Minimis Settlements

As early as its interim settlement policy in December 1984, EPA had provided for both mixed-funding and de minimis settlements. However, specific guidance was not provided on the use of these tools until after SARA affirmed the use of these settlement tools. This guidance recognizes the importance of each tool and encourages their use.

EPA's October 1987 guidance on mixed funding states that this tool can provide a substantial portion of response costs, thus conserving Superfund resources for use at other sites. It also states that mixed funding reduces the number of PRPs that EPA might sue in subsequent actions to recover the government's share of cost, thereby reducing litigation costs. EPA's June 1987 de minimis guidance recognizes that these settlements can simplify the enforcement process by eliminating numerous minimal-waste contributors from litigation and negotiations. Additionally, these settlements can help EPA obtain revenues earlier in the process to help finance the cleanup. In turn, these revenues reduce the funds major parties need to pay toward the site's cleanup, thereby increasing the likelihood that these parties will settle with EPA.

Use of Mixed-Funding and De Minimis Settlements

Between the enactment of SARA and September 7, 1989, EPA reached RD/RA settlements at 78 sites. Of these settlements, EPA reports that it has had 9 mixed-funding and 18 de minimis settlements that have either been completed or been referred to EPA headquarters and Justice. With

respect to these tools, table 3.6 shows that most regional project manager and attorney respondents had only some to little or no experience in using mixed-funding or de minimis settlements. However, it also shows that most regional project manager and attorney respondents believed EPA had underutilized mixed-funding and de minimis settlements. While most considered these tools underutilized, the table shows that respondents were about equally divided on how useful they perceived each of these to be, but these responses could be a reflection of their limited experience in using these settlement tools.

Table 3.6: Respondent Experience With, and Use and Usefulness of, Mixed-Funding and De Minimis Settlements

	Mixed funding		De minimis	
	Number of respondents	Percent	Number of respondents	Percent
Experience with tool				
Great to extensive	16	6	21	8
Moderate	27	11	27	11
Some to little or none	211	83	206	81
Use of tool				
Somewhat to greatly overutilized	10	8	6	4
Appropriately utilized	45	33	61	40
Somewhat to greatly underutilized	80	59	87	56
Usefulness of tool				
Very to extremely useful	45	33	54	37
Moderately useful	41	31	41	28
Somewhat useful to little or no use	49	36	52	35

Note: The total number of respondents for each category, e.g., experience with tool, represents the subset of respondents who have a basis to judge from among the 255 regional project managers and attorneys responding to our questionnaire.

Table 3.7 shows the factors identified most often by experienced project managers and attorneys as to why EPA may have used mixed-funding and de minimis settlements less frequently than it could have. One reason common to both of these settlement tools was limited staffing/low priority. We discuss this issue in greater detail in chapter 5 and in our earlier testimony on de minimis settlements.[10] Another factor common to both mixed-funding and de minimis settlements was limited staff training and experience. As discussed below, EPA has taken some action and has plans to provide more training concerning the use of these tools. The other factors identified in the table are also discussed below.

[10]Superfund De Minimis Settlements (GAO/T-RCED-88-46, June 20, 1988).

Table 3.7: Factors That Contributed to the Less Frequent Use of Mixed-Funding and De Minimis Settlements
(Respondents in Percent)

Reasons	Very greatly or greatly explains the less frequent use of: Mixed funding	De minimis
Settling parties agreed to full settlement	29	[b]
Limited staff training and experience	25	20
Limited financial or staff resources or low priority	21	22
Identified PRPs accounted for most waste or had enough resources to clean up sites	21	[b]
De minimis parties generally did not agree or were not well organized	[b]	22

[a]Only those reasons cited by at least 20 percent of the respondents who have a basis to judge are shown.

[b]Less than 20 percent of the respondents cited this factor.

Note: Percentages represent the subset of respondents who indicated that they had at least some experience using mixed funding (N=94) or de minimis settlements (N=106).

Mixed Funding

Two of the reasons respondents often cited as to why mixed-funding settlements were used less frequently are self-evident: (1) settling parties agreed to full settlement and (2) identified PRPs accounted for most waste or had enough resources to clean up sites.

Another factor that was often cited was the limited training and experience the EPA staff had with mixed-funding settlements. A 1-day training session has been held in each region to familiarize regional and project managers and attorneys with mixed funding. Moreover, this training, for the most part, was being provided concurrent with, or subsequent to, our questionnaire survey. As discussed later, EPA plans to provide more training. Besides providing training to encourage the use of this tool, EPA also has drafted a mixed-funding strategy, according to an EPA headquarters official, which it expects to issue in fiscal year 1990.

In addition to the factors identified by questionnaire respondents, our review in Regions V and IX identified two others that contributed to the limited use of mixed funding. In Region V, a regional attorney told us that one problem with this tool is that some EPA attorneys do not feel comfortable providing PRPs with federal funds to clean up a site for which the PRPs were responsible. In Region IX, an enforcement official attributed the nonuse of mixed funding there to the absence of any written mixed-funding proposals from PRPs.

De Minimis

As shown in table 3.7, limited staff/financial resources and low priority was one of the three factors most often cited by experienced regional project managers and attorneys as to why de minimis settlements may have been used less frequently than EPA could have used them. In our June 1988 testimony, we stated that EPA had not given de minimis settlements a high priority, as evidenced by (1) the limited staff resources allocated to its 10 regional offices—less than 5 staff years—for this activity for fiscal year 1988, (2) the absence of a specific number of de minimis settlements that EPA expects to achieve with its resources, and (3) the absence of specific guidance on the timing of these settlements.

We also reported that de minimis settlements had received a relatively low priority in Region V. There, the region's focus since SARA, with its mandated cleanup schedules, has been on completing site studies and remedy selections and obtaining overall site cleanup agreements with responsible parties, thus leaving little staff time and effort for the de minimis process.

In response to our June 1988 testimony, EPA stated in October 1988 that it had not assigned a low priority to de minimis negotiations. It stated that SARA's de minimis provisions are a new authority and it is in the process of developing a national strategy, targeted for issuance in November 1989, to help implement them. EPA stated that its efforts have focused on identifying common problems in implementing the de minimis provisions and training the regions in using these provisions.

As shown in table 3.7, experienced regional project managers and attorneys also cited limited staff training/experience as another reason de minimis settlements were not used more often. Regarding the need for training, EPA provided each of its regions with training on the use of de minimis settlements concurrent with the training it provided on mixed-funding settlements. According to EPA, this training resulted in identifying additional de minimis candidate sites.

Recent EPA Actions

According to the Administrator's June 1989 report, EPA will take the following steps to encourage the use of its various settlement tools. First, EPA headquarters will provide additional assistance and specialized training in the use of these tools, including information transfer among the regions based on their actual experiences in using or attempting to use these tools. Second, EPA will develop an incentive system that provides additional support for regions to use these tools. For example, when a region indicates that a de minimis settlement is appropriate,

additional staff support and financial resources (contract dollars) might be provided. And third, EPA will establish specific goals for the use of mixed-funding and de minimis settlements. Additionally, the report stated that EPA should determine if it is possible to set up special accounts in the regions to cover anticipated mixed-funding needs and to allow the regions to retain de minimis settlement funds for use at the site for which the settlement is reached. EPA's September 1989 plan for implementing the June 1989 report recommendations provides for completing these actions during fiscal year 1990.

Conclusions

EPA has experienced a number of problems in carrying out its Superfund enforcement program. It has had difficulty in obtaining regional office compliance with its requirements for beginning and completing negotiations. Additionally, EPA has not extensively used its powerful section 106 enforcement authorities to strengthen its negotiation posture and to obtain PRP cleanups. Finally, EPA has not fully used SARA's mixed-funding and de minimis provisions to facilitate settlements with major parties and/or to generate cleanup funds earlier in the enforcement process.

One factor that has negatively affected each of these various enforcement activities is limited financial or staff resources/low priority and/or EPA staff work loads. Additionally, the EPA Administrator's June 1989 report confirms that staffing and work loads have been a problem and that additional staffing may be needed, for example, to provide the regions with an incentive to use EPA's various settlement tools. Chapter 5 contains a more detailed discussion of staffing requirements for the Superfund enforcement program.

But staffing constraints are not the only factor that contributed to the problems we found. In part, lengthy negotiations occurred because EPA entered into negotiations without a clear bottom-line position, as evidenced by a written strategy, on major settlement issues and objectives. EPA's new requirement for mini-litigation reports to involve headquarters and Justice in case planning and management could help to resolve this problem if fully and properly implemented. Besides this action, EPA plans to establish time lines, including negotiation deadlines, for its enforcement and remedial activities. But EPA already has negotiation time frames. The problem is they were not always followed, which raises the question as to what EPA is doing to hold managers accountable for adhering to these time frames. Chapter 5 discusses the system and performance measures that EPA uses to hold its offices and regions accountable.

Experienced regional project managers and attorneys believe that the number and complexity of the issues to be resolved during negotiations is the most notable factor in explaining lengthy RD/RA negotiations. Accordingly, EPA could find, in setting time lines for the enforcement program, that a more realistic time frame is needed for RD/RA negotiations.

All in all, the underpinning of any enforcement program must be the agency's commitment to use its enforcement authority. If EPA continues to rely extensively on negotiations to obtain voluntary settlements with PRPs, then it must be prepared to make full use of its enforcement tools to strengthen its negotiation posture. While it has not done so during the period of our review, the EPA Administrator's June 1989 report indicates that EPA may now be ready to act by (1) routinely issuing orders if a PRP settlement is not reached after completion of negotiations, (2) seriously considering using judicial enforcement to compel compliance with its orders and exact penalties, and (3) seeking treble damages, where appropriate, during cost recovery when Superfund is used to clean up a site following noncompliance with its order. Aggressive but basic actions like these, although overdue, should, if properly implemented, foster more and quicker voluntary settlements, and in turn more timely cleanups, as PRPs become increasingly aware of the consequences of their inactions.

EPA's ability to issue and enforce orders, however, has been impeded by CERCLA's requirement that there be an "imminent and substantial endangerment." Experienced regional project managers and attorneys most often cited weak evidence of such an endangerment as the reason orders were not used more frequently. However, in conditioning section 106 actions on an "imminent and substantial endangerment," neither CERCLA nor its legislative history defines this requirement, and the courts have not consistently interpreted it. The uncertainties associated with the courts' interpretations, together with concerns over how well EPA can support such a finding, can only add to any doubts federal decision makers might have in using section 106's enforcement tools.

Besides its plans to provide the regions with staffing incentives to promote the use of its various settlement tools, EPA's plans to provide additional assistance and specialized training should help to overcome another factor—limited training and experience. This factor, according to EPA's regional project managers and attorneys, has contributed to the less frequent use of mixed-funding and de minimis settlements.

Matters for Consideration by the Congress

The "imminent and substantial endangerment" requirement applicable to section 106 of CERCLA has reportedly been an impediment to EPA's use of this section's enforcement authorities. Accordingly, the Congress may want to consider what purposes are being served by this requirement, and if appropriate, it may want to repeal the "imminent and substantial endangerment" requirement. As an alternative, it may want to consider substituting in the place of the "imminent and substantial" requirement, a requirement that there only need be a release or threat of release of a hazardous substance in order to facilitate EPA's issuance and enforcement of orders for the cleanup of Superfund sites.

Cost Recovery Efforts Are Inadequate

Though EPA is increasing the total amount of dollars returned to Superfund, it has recovered less than 10 percent of those costs that EPA has identified as ready for recovery.[1] Furthermore, the $157 million in costs that EPA has recovered through June 30, 1989, represents only 35 percent of EPA's goal to recover $450 million by 1991. EPA's cost recovery efforts have been significantly limited by the untimely pursuit of cost recovery cases. Additionally, provisions have not been made for recovering hundreds of millions of dollars in costs.

EPA has been unable to follow its own guidance for pursuing cost recovery cases because of the low priority and limited staff resources devoted to this activity. These factors, in turn, reduced not only the amount of EPA's cost recoveries, but the interest earnings that Superfund could have realized from the investment of these recoveries.[2] We estimate that Superfund could lose almost $6.7 million in annual interest earnings through EPA's inability to address its anticipated backlog for fiscal year 1989. Timely actions to obtain recoveries are important for other reasons. For example, the bankruptcy or death of a liable party is more likely to occur as cost recovery cases drag out, thus making recovery more difficult. Additionally, EPA's ability to recover funds can lapse because of statutes-of-limitations requirements.[3]

EPA officials acknowledge that cost recovery has been understaffed and that more people are needed to address the current backlog of cost recovery cases. To this end, an EPA official has stated that the agency is planning to request additional staff resources for fiscal years 1990-91 to eliminate any backlogs.

Through fiscal year 1988, EPA had not made provisions for recovering $800 million in costs. However, neither CERCLA nor its legislative history identifies the specific types of indirect costs that should be recovered as part of removal and response action costs. In the absence of such guidance, EPA opted to exclude costs for research and development and for the preliminary work at potential Superfund sites. In addition, EPA chose a method for distributing the remaining indirect costs that did not provide for the full recovery of these costs. EPA plans

[1]EPA defines costs that are "ready for recovery" as costs incurred at sites with completed removals and incurred costs at remedial action sites where on-site construction has been initiated.

[2]Excess monies in Superfund are required to be invested in U.S. Treasury securities.

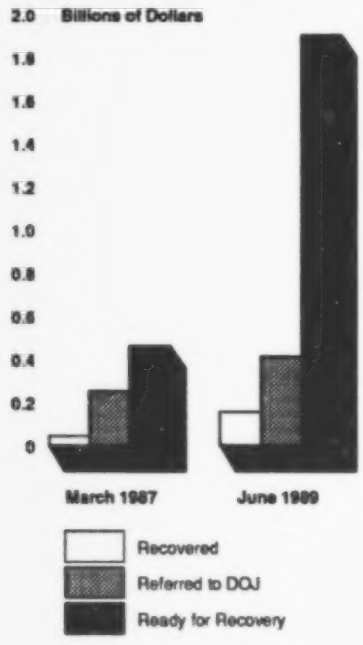
[3]Section 113(g)(2) of CERCLA generally gives EPA 3 years from the date of completing a removal and 6 years from the initiation of on-site construction of a remedial action to initiate cost recovery in a federal district court before losing its right to obtain recovery.

to use the rulemaking process to identify the types of expenditures appropriate for cost recovery. While EPA expects to have a final rule by July 1991, congressional action in this area would better enable EPA to defend challenges in its efforts to recover indirect costs.

Status of Cost Recovery

As shown in figure 4.1, EPA has obtained only a small percentage of its costs that are ready for recovery. As of March 1987, EPA had recovered $45 million. At that time, this amount represented 9.8 percent of costs ready for recovery. In comparison, the $157 million recovered by EPA as of June 1989 represents 8.3 percent of costs ready for recovery.

Figure 4.1: Status of Cost Recovery



Note: Figures are cumulative.

Source: Based on data from EPA.

Similarly, EPA has made little progress with respect to the cases it has been able to refer to Justice for cost recovery from the courts. Figure 4.1 shows that as of March 1987, EPA was seeking $253 million in cases

referred to Justice for cost recovery action. At that time, this amount represented 165 cases and 55 percent of the $460 million in costs ready for recovery. By comparison, the 269 cost recovery cases for $413 million referred to Justice through June 1989, represent about 22 percent of the $1.9 billion in costs ready for recovery. Thus, between March 1987 and June 1989, referrals to Justice for cost recovery, as a percentage of costs ready for recovery, dropped 33 percentage points, from 55 percent to 22 percent.

The $157 million that EPA has recovered through June 1989 represents only 35 percent of EPA's goal to recover $450 million by 1991.[4] An official in the Office of Solid Waste and Emergency Response (OSWER)—the office that manages the Superfund program—told us that EPA does not expect to reach the 1991 goal. However, according to the EPA Administrator's June 1989 report, EPA is planning to undertake a study to identify ambitious and realistic goals for the cost recovery program and communicate these expectations to the Congress and public. The agency expects to establish these goals by February 1990.

Untimely Pursuit of Cost Recovery Cases Wastes Money

EPA has not followed its own timetables for pursuing cost recovery cases. Timely actions are important because, among other things, they enable Superfund to realize interest earnings with respect to the funds recovered. While EPA's guidance recognizes the importance of, and encourages, timely cost recovery actions, such actions have not always occurred. At the three regions we visited, letters demanding payment were not issued or were issued late on 71 percent of the 48 cases we reviewed that had liable and financially viable PRPs. Timely action was not taken, according to EPA officials, because EPA lacks the staff resources necessary to pursue all cases eligible for recovery under its guidelines.

In all, as of June 1989, EPA had 1,260 cases involving almost $1.9 billion in costs eligible (ready) for recovery. Many of these cases have an expiration date for recovering costs coming due during fiscal years 1990-91 because of statute-of-limitations requirements. EPA officials expect to have sufficient staff resources available to ensure that recovery actions are taken on cases approaching the statute of limitations. Beyond this, an EPA official told us that EPA was planning to request additional resources to address the anticipated backlog of possibly as many as 121

[4]This goal was included in a Superfund document published in the spring of 1988 by OSWER. Also, EPA officials confirmed that this was the agency's goal.

and 145 total cases in fiscal years 1990 and 1991, respectively. Timely action to address this backlog would not only have produced earlier collections to help EPA meet its cost recovery goals, it would have enabled Superfund to earn interest on the monies collected.

EPA Criteria and the Importance of Timely Cost Recovery Actions

To obtain reimbursement for its response costs, EPA issues letters to PRPs demanding payment for its costs. These demand letters formally ask PRPs for cleanup funds and initiate the accrual of interest charges on the funds EPA has spent. If the letters do not result in a settlement, EPA can seek reimbursement for its costs by referring the case to Justice for action.

EPA guidance does not include a specific timetable for issuing demand letters, stating that they should be issued "as soon as practicable." However, EPA cost recovery guidance states that cost recovery actions, which EPA defines as the referral of a cost recovery case to headquarters, should be initiated no later than 1 year after a removal completion and 18 months after the signing of the record of decision for remedial actions.[5] Since EPA guidance states that demand letters are to be sent by the regions prior to EPA headquarters referral of a case to Justice, we used the 1-year and 18-month case referral criteria to determine whether demand letters were being used in a timely manner.

EPA has issued guidance on cost recovery time frames to ensure that the agency has updated evidence and witnesses to support a case and to avoid the risk of legal deadlines that could preclude it from taking action on a case. Delays in following these time frames can be complicated by bankruptcies or deaths of the PRPs. Additionally, the timely issuance of demand letters allows EPA to recover funds earlier, thereby enabling it to earn interest on the investment of these funds.

[5]According to EPA's June 1987 cost recovery guidance, cost recovery actions also could have been initiated during the later phase of construction of the remedial action if the construction was expected to take more than 2 years after the record of decision was signed. Additionally, the July 1988 guidance redefined the appropriate timing for cost recovery actions for sites with remedial actions as the beginning of the construction of the remedial action.

Untimely Action in Issuing Demand Letters

In EPA Regions II, V, and IX, we identified 98 cases eligible for cost recovery actions pursuant to EPA policies.[6] These cases included 61 removals and 37 remedial actions. After discussing them with regional officials, we determined that only 48 cases had viable PRPs and were, therefore, appropriate for cost recovery.

Table 4.1 shows that EPA did not issue a demand for payment on 22, or 46 percent, of the 48 cases appropriate for cost recovery. It also shows that EPA was from 4 to 18 months late in issuing a demand for payment on 12 other cases. In all, as of September 30, 1988, EPA did not issue, or was late in issuing, a demand for payment in 34, or 71 percent, of the 48 eligible cost recovery cases we reviewed.

Table 4.1: Cost Recovery Not Initiated or Initiated Late

	Number of cases			
Cases reviewed by GAO	**Region II (New York)**	**Region V (Chicago)**	**Region IX (San Francisco)**	**Total**
Total	**43**	**43**	**12**	**98**
Number with liable and viable parties	17	23	8	**48**
Number on which demand for payment not issued[a]	11	9	2	**22**
Number on which demand for payment issued late	1	7	4	**12**[b]
Percentage of nonissuance or late issuance				**71**

[a]Demands for payment were not issued as of September 30, 1988.

[b]Demands for payment were issued from 4 to 20 months late in these 12 cases.

Limited Resources Preclude Pursuit of Cases

EPA management officials in Regions V and IX attributed untimely cost recovery actions to the low level of resources and lower priority headquarters has devoted to cost recovery. Regions II and IX did not have full-time cost recovery staff, although officials in all three regions stated that they were seeking additional staff. Furthermore, many regional project managers and attorneys responding to our questionnaire reflected the same concern; over half (52 percent) of them considered the priority given to cost recovery to be somewhat or much too low.

[6]According to EPA Regions II, V, and IX, these 98 cases represented Superfund-financed removals, and all remedial actions on which cost recovery actions should have been initiated no later than March 31, 1988.

EPA officials in OSWER have acknowledged that a backlog of cost recovery cases exists. Both headquarters and regional officials have told us that resource constraints have placed the emphasis on initiating cost recovery actions before the statute of limitations expires, as opposed to meeting the time frames contained in EPA guidance.

EPA's Plans for Addressing Its Cost Recovery Backlog May Not Go Far Enough

Of the 1,260 cases (about $1.9 billion) ready for cost recovery as of June 1989, 571 cases valued at $28 million—an average of about $50,000 per case—were for completed removals. Under EPA's July 1988 cost recovery strategy, these cases generally receive the lowest priority, since they involve costs of less than $200,000. However, according to the EPA Administrator's June 1989 report, EPA plans to develop an improved strategy for handling these cases. Even after deducting these cases, EPA still had 689 high-dollar cases—all in excess of $200,000—worth $1.9 billion that were eligible for recovery. The cases in this group fall into two priority categories—those with and those without an expiration date coming due as a result of statute-of-limitations requirements. Among these two categories, cases with statute-of-limitations considerations are to receive the highest priority, lest EPA lose an opportunity to recover its costs.

While EPA expects to be able to address all cases approaching a statute-of-limitations requirement, EPA's preliminary data show that it will not be able to address about 130 cases, all with liable and financially viable PRPs, during fiscal year 1989.[7] Furthermore, this backlog of cases with liable and viable PRPs is expected to continue during fiscal years 1990 and 1991, with possibly as many as 121 and 145 total cumulative cases, respectively.

EPA officials told us that the resources being programmed for fiscal years 1990 and 1991 would be adequate to ensure that cases with statute-of-limitations considerations will be addressed. To address any backlogs for fiscal years 1990 and 1991, these officials stated that they would request a supplemental appropriation for fiscal year 1990 to address one-half of EPA's backlog. The remaining backlog is to be addressed with resources to be budgeted for fiscal year 1991.

[7]This backlog excludes the 571 completed removals worth $28 million. According to an EPA Superfund official, EPA expects to address only about 60 of these small cases over the next 2 years.

Delays in addressing its backlog of cost recovery cases has the effect of reducing the monies that Superfund has available to invest in U.S. Treasury securities, thereby resulting in lost interest earnings. For example, we estimated that Superfund would lose almost $6.7 million in interest earnings because of the lack of resources to address a fiscal year 1989 backlog of 130 cases.

In computing our estimate, we assumed that EPA was at least able to issue demand letters on 29 percent of these cases—the same rate as for the cases we reviewed (see table 4.1), thereby entitling it to collect interest on its costs from PRPs. Accordingly, we reduced the 130-case backlog by this percentage. For costs, we used the average direct contractual obligations of $800,000 for removals and $3.6 million for RI/FSs and remedial actions for eligible cost recovery cases as reported by EPA. We applied these costs to the mix of removal and RI/FS and remedial cases represented by the backlog. We applied a settlement rate of 46 percent, which was EPA's experience on fully settled cases during fiscal years 1987 and 1988, to estimate recoveries and then applied an interest rate of 8.39 percent, which is the current rate of return on Superfund's investments, to arrive at the lost interest earnings.

Similar interest earnings would be lost to the extent EPA is unable to obtain the necessary resources to address the projected backlogs for fiscal years 1990 and 1991 of 121 and 145 cases, respectively. Aside from losing interest, the longer EPA waits to pursue cost recoveries, the greater the probability EPA will encounter problems in trying to collect these monies.

Hundreds of Millions in Costs Have Been Excluded From Cost Recovery

EPA has followed a policy of not seeking the recovery of certain Superfund costs. EPA has excluded costs for research and development and for the preliminary work done at potential Superfund sites from its pool of indirect costs. Additionally, it chose a method to distribute the indirect cost pool that had the effect of excluding a large share of these costs from EPA's cost recovery efforts. EPA excluded these costs, which, according to the agency's estimates, totaled $800 million as of September 30, 1988, because it wanted to be conservative in its approach to recovering Superfund costs. In this respect, we found that neither CERCLA nor its legislative history provides guidance as to the kinds of indirect costs that are appropriate for EPA to recover. While a few courts have addressed EPA's practice of recovering indirect costs, those that did reached different conclusions regarding the appropriateness of recovering these costs.

In August 1988, EPA's Office of Comptroller[8] proposed changes that would enable EPA to seek recovery of these excluded costs in the future. EPA now plans to initiate rulemaking to identify the kinds of costs that will be pursued in cost recovery. The agency expects the rule to help it avoid litigating this issue in numerous future cost recovery cases. EPA officials expect this regulation to be issued in July 1991.

The Nature and Extent of Excluded Costs

EPA incurs direct and indirect costs in its efforts to clean up Superfund sites. Direct costs include items that can be tied directly to one site, e.g., contractor services, travel expenses, and EPA payroll. These costs are charged directly to sites. Indirect costs are support costs that for the most part cannot be directly linked to a particular site. EPA's Comptroller has defined five categories of indirect costs as follows:

- administrative management (facilities, personnel, finance, budget, procurement, and other support services);
- enforcement, legal, and audit services (non-site-specific costs from the Office of General and Regional Counsels, the Inspector General, and Enforcement and Compliance Monitoring);
- program management (all non-site costs for OSWER and regional hazardous waste management divisions for such things as management, planning, information systems, resource management, and policy formulation);
- special account costs (preliminary assessments of potential Superfund sites); and
- Superfund research and development (all non-site costs, including the costs for the alternate or innovative treatment technology research and demonstration program).

To date, EPA's policy and practice has been to seek recovery of indirect costs only from the first three categories. According to an EPA commissioned study, the agency excluded special account costs (the fourth category) because the agency expected that these costs would be assigned directly to site-specific accounts as the sites officially became Superfund sites. However, EPA had not previously required contractors to provide a site-specific breakdown for billing EPA for these special account activities. Even if EPA had required the contractors to provide such a breakdown, many of these costs would not have been charged to specific sites because a large number of these sites do not represent a serious threat

[8]The Office of Comptroller is a part of the Office of Administration and Resource Management.

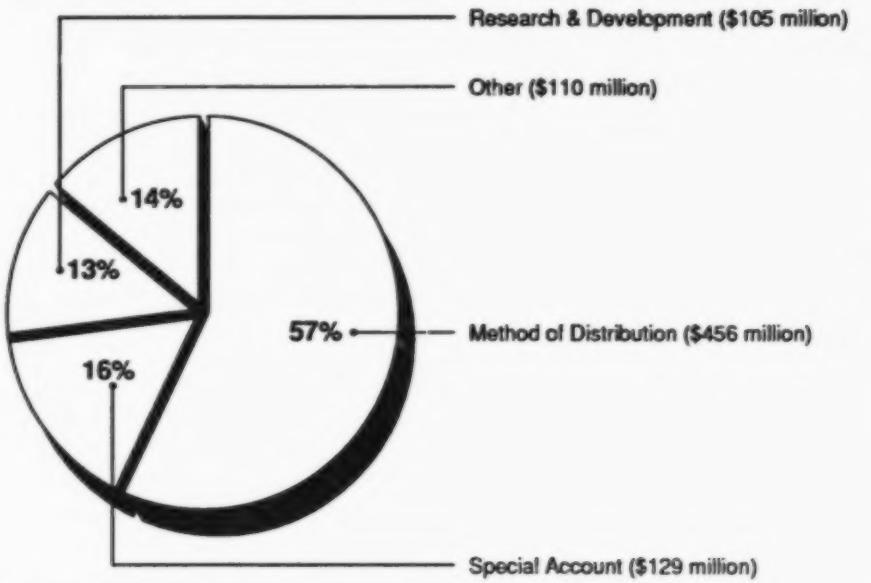
to the public or the environment and therefore never become eligible for Superfund response actions.

Besides these costs, the study identified that EPA has also excluded research and development costs (the fifth category) because of the difficulties associated with determining the appropriate allocation of the benefits and costs of this research among sites. It also excluded some other minor indirect costs that included (1) miscellaneous indirect costs for fiscal years 1981 and 1982, which were excluded because the application of these costs to the few sites that existed at that time would have been disproportionate; (2) costs incurred by other agencies that assist with Superfund cleanups, such as the United States Coast Guard; and (3) some non-site-related equipment costs, such as computers.

For the indirect costs included in the indirect cost pool, we found that EPA's method of distributing these costs has the effect of excluding a large portion of this pool from potential recovery. This is because EPA divides the total of its indirect costs pool by the total of site and non-site staff hours to compute an hourly rate. However, EPA's indirect cost rates are applied only to site staff hours when computing a site's share of indirect costs. As these site staff hours account for only 31 percent of the total site and non-site hours, only this portion of the indirect costs pool is distributed to sites for cost recovery purposes. The remaining 69 percent attributable to non-site staff hours is effectively excluded from EPA's cost recovery efforts.

All of the above practices have had the effect of excluding a total of $800 million in costs through fiscal year 1988. Figure 4.2 shows a breakdown of the $800 million in excluded costs.

Figure 4.2: Breakdown of Excluded Costs



Source: EPA.

There is considerable disagreement as to the extent to which EPA should recover its indirect costs. The resolution of this issue, however, has been complicated by the lack of congressional guidance.

Legality of Recovering Costs

While EPA has acted to exclude certain indirect costs, CERCLA does not specifically authorize the recovery of indirect costs. Section 107 of CERCLA merely states that responsible parties are liable for all costs of removal or remedial action not inconsistent with the National Contingency Plan.[9] Furthermore, with the exception of certain studies, investigations, and enforcement activities, the law is silent and the legislative history provides no guidance on the types of indirect costs that should be included or excluded from the removal and remedial action costs that EPA is entitled to recover.

Additionally, few courts have dealt directly with the issue of recovering Superfund's indirect costs, and those that did have not established a

[9]The National Contingency Plan is the federal regulation that guides the Superfund program.

clear precedent. In a May 1988 decision, a federal district court in Michigan ruled that EPA could recover indirect costs that were not directly associated with a particular site.[10] The court noted that the legislative history is silent and the case law sparse on the issue of recoverability, and stated its opinion that the language and broad remedial purpose of CERCLA support a liberal interpretation of recoverable costs.[11]

In another recent case, the court denied EPA recovery of indirect costs, including expenses for rent, utilities, supplies, clerical staff, and other overhead. The court stated that it was disallowing these costs because, while they were necessary to operate the Superfund program, they could not be attributed directly to the Superfund site at issue in that case.[12] An EPA official has stated that both of these cases were on appeal as of August 1989.

EPA's Current Approach

In 1987, EPA contracted for a study to evaluate its indirect cost practices. After receiving the draft results of the study, the Comptroller's Office prepared a paper in August 1988 stating that it was the Comptroller's intent to account fully for all indirect costs. Both the study and the Comptroller included the costs of research and development and preliminary work at potential Superfund sites in their definition of indirect costs. However, the proposal to include these costs has not received unanimous agency support. For example, in January 1989, EPA's Assistant Administrators of OSWER and the Office of Administration and Resource Management expressed differences of opinion on what indirect costs should be recovered. In the meantime, the Comptroller has requested that EPA's Office of General Counsel provide a legal opinion on what indirect costs are recoverable. An official within EPA's Office of General Counsel stated that the agency was still studying this issue as of August 1989.

The EPA Administrator's June 1989 report recommends that EPA initiate rulemaking to identify the types of costs that will be pursued in cost recovery. EPA expects this rule to be issued in July 1991. In the interim,

[10]An EPA document filed in the case stated that the costs were for "such things as rent and utilities for site and non-site staff office space; payroll and benefits for program managers, clerical support and other administrative support staff; and pay earned by on-scene coordinators while on leave, or performing tasks not directly associated with a particular site."

[11]United States v. Northernaire Plating Co., 685 F. Supp. 1410 (W.D. Mich. 1988).

[12]United States v. Ottati & Goss, 977 F. Supp. (D.N.H. 1988).

EPA officials told us that EPA will follow its present policies and practices, including the use of its current methodology, for computing indirect cost rates.

An EPA official within the Office of General Counsel stated that a rule would serve the agency's current purposes and added that EPA was not yet prepared to make a statement on whether the agency should seek additional congressional guidance in terms of an amendment to CERCLA.

While rulemaking may help EPA to better defend its position, rulemaking will not resolve the basic issue of whether EPA has authority under CERCLA to recover indirect costs. Accordingly, EPA's recovery of indirect costs will continue to be subject to legal challenges, and considering past court decisions, it is uncertain whether EPA would prevail.

Conclusions

Though EPA continues to make progress in its total cost recoveries, the agency has recovered only 35 percent of its 1991 goal of $450 million. EPA reportedly has not had sufficient resources to initiate timely cost recovery or to address its backlog of cost recovery cases. However, EPA is considering providing additional staff resources to address its backlog—an action that could yield significant interest earnings through the expedited recovery of cleanup costs financed from Superfund.

EPA has not sought to recover hundreds of millions of dollars in indirect program costs. Moreover, the appropriateness of excluding these costs is clouded by the lack of legislative guidance on the types of indirect costs that might be appropriate for recovery as part of removal and remedial action costs. While EPA plans to promulgate a rule to identify the types of costs that will be pursued in cost recovery, we believe congressional action in this area will better ensure that EPA is successful in defending challenges to its efforts to recover Superfund's indirect costs.

Matters for Consideration by the Congress

To help EPA in its cost recovery efforts, the Congress may want to amend section 107 to specifically authorize the recovery of Superfund's indirect costs. Additionally, the Congress may wish to identify the kinds of indirect costs that EPA should seek to recover when recovering response action costs from liable PRPs.

Recommendation to the Administrator, EPA

To improve the recovery of cleanup costs from PRPs, we recommend that the Administrator, EPA, provide sufficient staff resources, if cost-beneficial, to address its backlog of cost recovery cases. In implementing this recommendation, EPA should consider using productivity measures as discussed in the next chapter.

Better Planning Is Needed to Effectively Manage the Enforcement Program

Goal-setting and strategic planning are essential for the success of any major undertaking. EPA has a strategic-planning initiative for developing goals and strategies for dealing with hazardous waste. However, as we reported in July 1988, these efforts have yet to advance beyond an assessment of environmental problems.[1] Despite this shortcoming, we found that EPA has a number of strategies for its Superfund enforcement program. However, we also found that each of these strategies lacks one or more essential components we believe are necessary for sound and effective planning. The two components most often missing were (1) long-term measurable goals and milestones and (2) resource requirements.

Moreover, up until June 1989, EPA had no overall strategy to pull these individual enforcement plans and strategies together with a set of common objectives. In his June 1989 report, the EPA Administrator details his strategy for the Superfund program; it emphasizes enforcement over Superfund financing. More specifically, as noted in chapter 3, the report provides for using a broad range of administrative and legal tools to induce private-party cleanups. While a step in the right direction, this strategy, together with EPA's September 1989 plan for implementing the report's recommendations, also does not contain long-term measurable goals nor identify the resources that will be required to achieve the strategy's objectives.

In addition, EPA needs better measures of performance to effectively manage Superfund enforcement. Under its present system of measuring performance, EPA tracks the enforcement work done, not its progress toward meeting established goals. Similarly, EPA needs productivity measures for quality, timeliness, and efficiency to strengthen accountability and evaluate changes in performance— measures that are lacking under the present system. The EPA Administrator also announced in the June 1989 report that EPA will begin to review Superfund's accountability measures with an eye toward focusing more directly on improving performance.

The absence of resource requirements from Superfund enforcement plans and strategies may have serious consequences because limited

[1] Hazardous Waste: New Approach Needed to Manage the Resource Conservation and Recovery Act (GAO/RCED-88-115, July 19, 1988)

financial/staff resources and low priority underlie many of the problems discussed in this report. Our previous work on the Superfund program has shown that EPA needs to use more objective techniques to support its budgeted staffing needs.

Importance of Goals and Strategic Planning

In our July 1988 report on EPA's management of hazardous waste under the Resource Conservation and Recovery Act, we stated that goal-setting and strategic planning are the first key steps of any major undertaking. Furthermore, goals should be measurable and stated in terms of desired results. Goals for major programs are often multiyear or long-range. A strategy to achieve the goals should contain the tasks to be performed, appropriate milestones, organizational responsibilities, required resources, and a means to track or measure progress annually.

The benefits of having goals, and strategies to achieve them, are many. Goals and strategies provide focus and direction and are a benchmark for measuring performance. They also trigger a reassessment if progress in achieving goals is not satisfactory. When coordinated within the agency, goals and strategies inform all staff members of their organizational responsibilities. And when communicated outside the agency, goals and strategies provide a sense of agency direction, priorities, and timing for expected results. Goals and strategies can also provide the Congress with a sense of what can be achieved with the level of resources committed and a way to hold the agency accountable for achieving stated goals.

In June 1985, EPA launched an agencywide strategic-planning initiative. This initiative called for (1) assessing environmental problems; (2) establishing explicit goals, defined as outcomes, to be accomplished over a specific time frame; (3) identifying the major regulatory, enforcement, policy, research monitoring, grants, and legislative activities necessary to achieve the goals; and (4) developing indicators, or measures of progress, for achieving goals. This initiative was intended to outline EPA's management agenda for the next 5 to 10 years. The plans resulting from this initiative were to be revised periodically and were to serve as the basis for budget requests and annual operating guidance.

Hazardous waste was selected as one of the areas in which the first strategic plans would be developed. However, in our July 1988 report, we stated that EPA's efforts on this strategic initiative had not gone much beyond the first step of assessing environmental problems. According to EPA officials, EPA's efforts have been focused on defining how hazardous

waste is managed and understanding the various impacts of changing waste management practices. While agreeing that this effort has not progressed past the first step, EPA officials nevertheless said that this effort has led to important insights and a tool to evaluate future decisions on hazardous waste policy.

Enforcement Plans and Strategies Are Missing Essential Ingredients

Besides its strategic-planning initiative for hazardous waste, EPA has a family of plans and strategies to guide its Superfund enforcement program. For example, in chapter 3 we discussed EPA's strategy for streamlining the settlement decision-making process and in chapter 4, EPA's cost-recovery strategy. These plans and strategies, however, do not have one or more essential components for sound and effective planning.

Table 5.1 shows the various plans or strategies that EPA has completed for the Superfund enforcement program and the deficiencies we found in them. Specifically, each plan was missing one or more of the following components, which we discussed in our July 1988 report and which we believe are important: (1) specific, measurable goals and appropriate milestones for achieving them, (2) specific tasks to be accomplished to meet the goals, (3) required resources, (4) organizational responsibilities, (5) a system for measuring and reporting performance in accomplishing tasks and meeting goals, and (6) coordination of the strategy with and communication of it to the Congress and the public.

Table 5.1: Comparison of Various Superfund Enforcement Strategy Documents With GAO Criteria

	GAO criteria					
Strategy document	**Measurable goals and milestones**	**Tasks to be done**	**Resources required**	**Organizational responsibilities**	**Performance reporting/ measuring system**	**Coordination/communication with the Congress and public**
Guidance on special notice letters	No	Yes	No	Yes	Yes	Yes
Streamlined settlement decision process	No[a]	Yes	No	Yes	No	No
Interim settlement policy	No	Yes	No	Yes	Yes	Yes
Section 106 enforcement strategy	No	Yes	No	Yes	Yes	No
Report of the settlement incentives/ disincentives work group[b]	No	Yes	No	Yes	No	No
Superfund cost recovery strategy	No	Yes	No	Yes	Yes	No

[a]Contains milestones but no quantifiable goals

[b]This report included the following documents: (1) Draft Guidance on Section 106 Judicial Actions, which was finalized in February 1989. (2) Selection and Timing of Actions Against Non-Settlors. (3) Strategies for Encouraging Settlements and Dealing With Non-Settlors in Multi-Party CERCLA Cases, and (4) De Minimis Contributor Settlements.

As the table shows, the two components missing from all the strategies are specific measurable goals and milestones and resources required to implement the strategy. With two exceptions, the strategies were not coordinated/communicated with the Congress and the public. While EPA has a performance measuring system to track progress on most of its strategies, as we discuss later, this system needs better measures to increase accountability. In general, EPA's various enforcement strategies discuss the tasks to be done—the policies and procedures to be followed—and the organizations responsible for performing them.

While EPA has a number of individual enforcement strategies, EPA officials told us that EPA has no overall enforcement strategy to tie them together. However, the EPA Administrator's June 1989 report set forth the following overall strategy for the Superfund program:

- Control acute threats immediately.
- Place worst sites, worst problems first on the road to cleanup.
- Carefully monitor and maintain sites over the long term.
- Emphasize enforcement to induce private-party cleanup.
- Seek new technologies for more effective cleanup.
- Improve efficiency of program operations.
- Encourage full participation by communities.

In setting out this strategy for Superfund, the report also identified specific actions EPA has underway or plans to take in pursuing this strategy. The report, however, did not identify what long-term measurable goals are to be used in connection with this strategy to evaluate or monitor progress. Nor does the report identify the resources that will be required to implement this strategy. Furthermore, these shortcomings were not addressed in EPA's September 1989 plan for implementing the report's strategy and related recommendations.

In our July 1988 report, we also pointed out that EPA's plans and strategies for managing hazardous waste under the Resource Conservation and Recovery Act were missing components we believed important, and we recommended that EPA engage in a strategic-planning effort to include them. EPA concurred that strategic planning and the establishment of measurable goals are essential to the effective management and implementation of this program. However, it said that our report does not mention several planning processes that set measurable goals and provide for both short- and long-term strategies. It cited as examples the agency operating guidance; the program's implementation plan; the Strategic Planning and Management System, which we discuss in detail in the next section; and the multiyear strategies. In rebuttal, we stated that these planning documents for the most part contain annual rather than multiyear objectives and do not contain specific measurable goals or the resources necessary to accomplish the more general goals stated in the documents.

Better Measures Are Needed to Increase Accountability

Once developed, these measurable goals should be linked to measures in EPA's Strategic Planning and Management System (SPMS) to hold managers accountable, as we reported in August 1988.[2] However, we also reported that SPMS accountability measures are generally defined to track various activities, such as the number of inspections made and the

[2]Environmental Protection Agency: Protecting Human Health and the Environment Through Improved Management (GAO/RCED-88-101, Aug. 16, 1988).

number of permits issued, rather than what it achieves. Our current review showed that this criticism is equally applicable to the accountability measures used for Superfund enforcement.

Despite this criticism of SPMS, we reported that it has been an effective force for driving EPA's work and that opportunities exist to use this system to (1) provide an operational link between the work done and the results to be achieved and (2) include productivity measures for quality, timeliness, and efficiency to strengthen accountability for program results and evaluate changes in performance. Considering the regional noncompliance with EPA requirements discussed in this report, we believe there is a need in the Superfund enforcement program for the increased accountability that can be provided by productivity measures. According to the EPA Administrator's June 1989 report, EPA has several actions planned or underway to improve its performance measures.

Enforcement Targets Do Not Link Work Done to Results to Be Achieved

EPA has established measures (targets) of performance for its Superfund enforcement program through SPMS and the Superfund Comprehensive Accomplishments Plan (SCAP). SPMS was initiated in 1984 to provide the Administrator with (1) a process for setting the agency's direction by articulating goals and priorities through long-term planning and development of an annual list of priorities, (2) means to translate priorities into operational plans through annual operating guidance, (3) ways to hold program offices and regions accountable for agency activities through measures and commitments reported quarterly, and (4) a vehicle for evaluating progress through quarterly meetings between the Deputy Administrator and program assistant administrators and through semiannual meetings between the Deputy Administrator and each regional administrator.

SPMS measures for the Superfund program are generated through the SCAP, which OSWER uses to plan, budget, track, and evaluate progress toward Superfund site cleanups. As the central planning mechanism for Superfund, SCAP affects and is affected by all agency and Superfund program-specific planning and management systems, such as the agency Annual Operating Guidance, the Superfund budget, SPMS, and Superfund work load models.

Agency Operating Guidance affects SCAP because it defines Superfund goals for the upcoming year. SCAP measures in turn are designed to reflect Agency Operating Guidance and serve as the foundation for determining budget priorities, such as the dollar levels and the total

staff years (level of full-time equivalents) to be requested in EPA's budget request. SPMS measures are a subset of planned SCAP activities, selected by EPA to set and monitor environmental objectives for a fiscal year. Planned SCAP activities also provide the outputs the Superfund work load model uses to distribute budgeted staff years to headquarters and regional offices. The SCAP provides program management through project planning and resource allocation, and program accountability and evaluation through goal-setting and monitoring. Both functions are performed through the setting of measures or targets and reporting against those measures/targets.

In our August 1988 report, we stated that one of our primary concerns was the need for EPA to link environmental measures with program activities to assess program effectiveness. In this regard, we reported that SPMS has been criticized for its lack of measurements of environmental results. (EPA is now working to develop environmental indicators for the Superfund program, according to its Annual Operating Guidance for fiscal year 1989.) Despite this criticism of SPMS, we reported that a 1986 internal study of SPMS showed strong agency support for the system and general agreement that the accountability portion of the system was a powerful tool for driving work and resources in the field.

Recognizing this importance of SPMS, we reported that another major criticism of SPMS measures was that they generally reflect what the agency does, not what it achieves. As shown in table 5.2, we found that this is also a legitimate criticism in connection with the objectives and measures used for the Superfund enforcement program.

Table 5.2: Fiscal Year 1989 SPMS Measures for Superfund Enforcement

Objective[a]	SPMS measure[a]
Achieve maximum levels of reimbursement of Superfund monies expended in site cleanups	Number of cost recovery actions referred to headquarters or Justice seeking reimbursement of response costs totaling at least $200,000 for (1) removals and (2) remedial action
	Resolution of section 107 judicial actions (no. of settlements entered in court, cases withdrawn or dismissed, or trial concluded/judgment entered)[b]
	Number of sites at which an administrative settlement for cost recovery was reached with PRPs
Achieve and maintain maximum levels of cleanup through removal enforcement	Number of sites with administrative order (unilateral or consent) for removal action
Focus removals on the most serious incidents requiring EPA participation	For fund- or PRP-financed removals at NPL sites: Number of (1) starts, (2) completions, (3) completed removals ready for deletion
Implement an integrated program that effectively uses Superfund resources and PRP participation to support and implement RI/FS activities	Number of NPL sites with PRP-financed RI/FS starts
Implement a cost-effective remedial design program	Number of NPL sites with a fund- or PRP-financed first or final remedial design start
Implement a cost-effective remedial construction program	Number of NPL sites with a fund- or PRP-financed first or final remedial action

[a]Excludes enforcement activities associated with federal facilities and selection of remedy

[b]SPMS also will track the dollars recovered for this activity

For example, the first measure, "number of cost recovery actions referred to headquarters or Justice," does not include an expression of the level of reimbursement to be achieved as a result of the referrals; that is, although the number of referrals is measured, no operational link is made between the referral activity and the objective of achieving maximum levels of reimbursement. The other cost recovery measures also do not link operationally to achieving maximum levels of reimbursement. As a result, EPA would have a harder time holding program offices, managers, or staff accountable for achieving maximum levels of reimbursement. In addition, the measures—number of referrals or settlements entered/reached—implies that referrals/settlements should affect reimbursement levels but set no measurement for the amount of this impact. Similarly, the other SPMS measures listed do not link well to the stated objectives.

The SCAP targets or measures for Superfund enforcement, i.e., those in addition to ones used in SPMS, similarly report what the agency does, rather that what it achieves. According to the SCAP for fiscal year 1989, Superfund's mission is to maximize the protection of human health and the environment through fast, effective, and efficient cleanup of high-

priority sites and releases. To fulfill this mission, the SCAP identifies the following six goals: (1) address high-priority sites and releases first, (2) implement effective remedies, (3) achieve efficient implementation of all program activities, (4) pursue enforcement actions, (5) increase the role of others (PRPs and states), and (6) achieve a well-managed Superfund. The SCAP, however, does not relate any of these goals to any of the specific targets or measures used. These SCAP measures include the following:

- PRP searches started at (1) NPL sites and (2) non-NPL sites.
- PRP searches completed at (1) NPL sites and (2) non-NPL sites.
- Number of RI/FS negotiations (1) started and (2) completed.
- Number of RD/RA negotiations (1) started and (2) concluded.
- Resolution of section 106 judicial actions (no. of settlements entered in court, cases withdrawn or dismissed, or trial concluded/judgment entered).

Table 5.3 illustrates how measures and objectives could be redefined in terms that are operational as well as measurable.

Table 5.3: Defining Objectives in Operational and Measurable Terms

Potential objective	Possible measures
Increase the voluntary response rate of PRPs to 50 percent in each response action category while reducing the time period required to obtain voluntary responses[a]	Percentage of response action costs borne by PRPs as a result of voluntary settlements reached within prescribed time periods
	Percentage of RD/RA actions performed/financed by PRPs as a result of negotiated settlements lasting fewer than 180 days
	Percentage of RI/FS actions performed/financed by PRPs as a result of negotiated settlements lasting fewer than 120 days
Increase to 75 percent the percentage of total Superfund expenditures ready for cost recovery that are covered by cost recovery actions	Percentage of Superfund expenditures ready for recovery covered by section 107 referrals or judicial and administrative settlements
Increase the level of recoveries to 80 percent of response action costs	Percentage of EPA's response action costs incurred at sites covered by judicial or administrative settlements recovered
Improve PRP searches to reduce to 25 percent or less the share of total write-offs attributable to the absence of liable or financially viable PRPs	Percent of Superfund expenditures written off as uncollectible because of the absence of liable or viable PRPs

[a]As noted in ch. 1, EPA's goal is to have PRPs finance 33 percent of RD/RAs, and possibly as many as 50 percent. However, neither goal is included in any of the strategies we reviewed.

Productivity Measures Promote Effectiveness and Efficiency While Strengthening Accountability

In addition to measuring the results achieved, we reported in August 1988 that EPA could also use productivity standards and goals to measure and evaluate changes in task performance levels while strengthening accountability for program results. Besides measuring resource efficiency (output per unit of input), productivity measures allow the quality and timeliness of program delivery to be assessed on the basis of standards that management defines. While our August 1988 report discusses EPA's need in general for productivity measures, the need for productivity measures to better manage the Superfund program was discussed in our October 1987 report.[1] The instances of noncompliance with EPA requirements we found in our current review reinforce the need to have productivity measures to strengthen accountability.

In our August 1988 report, we concluded that EPA needs to build productivity measures into the SPMS accountability system to provide feedback on the quality, timeliness, and efficiency of delivery of services. The report recognized the increased attention productivity was receiving in connection with the President's deficit reduction goal and the challenge productivity improvements present for many agencies. It discusses the adequacy of EPA's existing measures for assessing productivity and it identified some of the information that would be useful to have in assessing productivity. The report recommended that EPA refine accountability measures in its planning by including productivity goals for assessing quality, timeliness, and efficiency of service delivery. EPA has not yet responded to the report.

In October 1987, we reported that productivity measures were not being used to (1) gauge the appropriateness of Superfund's work force size and skill mix and (2) ensure that staff resources were used efficiently, considering that regional offices differ in their work force size, skill mix, and methods of operation for carrying out the program. We pointed out that data exist for measuring productivity and provided an example of a productivity index that could be used in one area of the Superfund program.

We recommended that EPA use productivity measures to gauge the appropriateness of Superfund's work force size and skill mix, including regional variations. EPA stated that it would be impractical to carry out this recommendation because each hazardous waste site is unique, having characteristics that are not comparable with other sites. In reply,

[1]Superfund: Improvements Needed in Work Force Management (GAO/RCED-88-1, Oct. 26, 1987).

our final report pointed out that such differences may present a challenge, but they should not be viewed as a barrier to using productivity measures. Alternatively, we stated that management could measure the rate of change in productivity from year to year to eliminate or minimize distortions.

Furthermore, our current review shows that despite any variations that may exist between sites, EPA has requirements for timeliness that could be used to develop productivity measures to increase accountability. As discussed in chapters 2, 3, and 4, EPA regions have not been fully complying with EPA requirements for (1) completing PRP searches, (2) issuing SNLs to begin negotiations, (3) concluding negotiations, and (4) issuing demand letters for cost recovery. Assuming these requirements are realistic, we believe EPA could obtain better compliance through increased accountability if it used these requirements to set productivity measures for timeliness along the lines shown in table 5.4.[1]

Table 5.4: Examples of Productivity Measures for Timeliness of Selected Superfund Enforcement Activities

Requirement	Productivity measure for timeliness[a]
Complete PRP searches no later than 90 days before scheduled start of RI/FS	Complete PRP searches no later than 90 days before scheduled start of RI/FS at no fewer than 85 percent of sites
Issue SNLs no later than signature of the record of decision	Issue SNLs on or before signature of the record of decision at no fewer than 90 percent of sites
Complete RD/RA negotiations within 150 days of the start of negotiations	Complete RD/RA negotiations within 150 days at no fewer than 95 percent of sites
Issue demand or close-out letter no later than 120 days after completing removal action	Issue demand or close-out letter no later than 120 days after removal completion at no fewer than 75 percent of sites

[a]Percentages were arbitrarily selected for illustrative purposes only

Similarly, EPA could apply productivity measures to its cost recovery activities. In table 5.3, we indicated that the "percentage of Superfund expenditures ready for recovery covered by section 107 referrals and judicial and administrative settlements" is one possible measure for tracking progress in meeting cost recovery objectives. Regarding this measure, we believe the efficiency of cost recovery could be evaluated by comparing, for example, the amount of annual Superfund expenditures placed under cost recovery (outputs) with the staff years budgeted or expended for cost recovery (inputs). Table 5.5 shows what results might be produced using actual cost recovery receipts instead as outputs.

[1]As noted in ch. 3, RD/RA negotiation time frames may be unrealistic given the complexity of the issues to be resolved.

Table 5.5: Efficiency Measures for Cost Recovery

Fiscal year	Collections (in millions)	Staff years available	Average collections/ staff year (in thousands)
1986	$15.7	130	$120.8
1987	18.3	242	75.6
1988	52.0	204	255.1
3-year total	$86.0	576	$149.4

Note: Collections are deflated in 1983 dollars

As the table shows, using this measure, productivity fell off in fiscal year 1987 compared with a year earlier before rebounding in fiscal year 1988. Although these data are for EPA as a whole, the agency could assess the cost recovery efficiency of each of its regions in a similar manner. Alternatively, the efficiency of each region could be compared with specific expectations and/or prior year experience. EPA could set specific expectations, considering such things as the size and status of the region's portfolio of cases ready for cost recovery.

EPA's Current Plans for Measuring Superfund's Progress

EPA will begin tracking a limited set of environmental measures or "indicators" in 1990 to better reflect Superfund's progress in protecting human health and the environment, according to the EPA Administrator's June 1989 report. Also, by October 1, 1989, EPA will begin collecting data to report (1) the timeliness of moving a site through the various stages of site remediation, measured against preestablished criteria, and (2) the extent of PRP participation in the program. In addition, EPA will begin reviewing Superfund's internal management measures with an eye toward eliminating unnecessary or redundant reporting and focusing more directly on improving performance. In the area of cost recovery, the report states that EPA should immediately undertake a study to identify ambitious and realistic goals for the cost recovery program and communicate them to the Congress and the public. According to EPA's September 1989 plan for implementing the report's recommendations, cost recovery goals are to be established by February 1990.

Improvements Needed in Planning Staff Resource Requirements

Besides not identifying measurable goals, EPA's various Superfund enforcement strategies leave out another crucial component—resource requirements. Whether stated in terms of "limited financial/staff resources," "low priority," or "staff work load," EPA's regional project managers and attorneys indicated that the lack of EPA staff resources, either directly or indirectly, contributed to many of the problems discussed in this report. For example, regional project managers and attorneys believed limited staff resources contributed to the less frequent use of EPA's various enforcement and settlement tools. Staffing limitations also negatively affected EPA's timely pursuit of cost recovery cases. In fact, an overwhelming number of regional project manager and attorney respondents indicated that their regions have a need for more staff to properly carry out the Superfund enforcement program. Many also responded that their work load is too heavy. We discussed the need for improvements in EPA's budgeting of staff resources in both our October 1987 and August 1988 reports.

In all, 96 percent of regional project manager and attorney respondents indicated that their regions either definitely or probably needed additional personnel—legal, technical, or administrative/clerical—to properly carry out the Superfund enforcement program. Almost 83 percent of the respondents indicated that their regions "definitely" needed additional personnel.

Concerning work load, 66 percent of regional project manager and attorney respondents indicated it was either somewhat or much too heavy. In contrast, 4 percent considered their work load to be too light while the remainder considered it just about right. Furthermore, about 63 percent of the respondents stated that their work load somewhat or greatly decreased the efficiency of their work. But this response may be conservative because 84 percent of the respondents indicated that the work loads of other project managers or attorneys decreased the efficiency of their work.

In October 1987, we reported that the entire Superfund program was understaffed by 36 percent in early 1987, according to our survey of Superfund's technical employees, and that this finding equated to a need for 375 to 600 additional staff years.[5] Although staffing was increased around this time by amounts sufficient to cover these shortages, we reported that EPA needed to improve work force planning to better support Superfund's staffing requirements. Specifically, we reported that

[5]GAO/RCED-88-1.

EPA relies on the judgmental estimates of its managers on the staff time required to carry out various activities in estimating Superfund's staffing needs. We pointed out that historical data on the time employees actually spend on various activities are not routinely collected in sufficient detail to validate staffing needs.

Accordingly, we recommended that EPA examine the costs and benefits of using more objective techniques to determine staffing needs, including the collection of more specific historical time data from employees to help validate the reasonableness of its staffing estimates. In responding to our recommendation, EPA did not address whether it was willing to explore using more objective techniques in budgeting for Superfund's staffing requirements.

The need respondents identified for more regional staff resources may be attributable in part to employee turnover. In this respect, we stated in our October 1987 report that Superfund employee turnover more than doubled between fiscal years 1985 and 1986, surpassing the rate for all federal employees. Moreover, we reported that most program managers we interviewed expected turnover to increase under the expanded program authorized by SARA.

Our current questionnaire suggests that turnover is a continuing problem. Specifically, about 79 percent of the regional project manager and attorney respondents having a basis to judge indicated that employee turnover had decreased the efficiency of their work over the past year.

To help address its staffing and turnover problems, the EPA Administrator's June 1989 report states that EPA will

- develop an incentive system, which might include, for example, additional staff and financial resources, to provide additional support for regions to use EPA's settlement tools;
- encourage the creation of specialized regional units for enforcement support activities, such as cost recovery and PRP search units, adequately staffed with a proper skill mix;
- take steps to reduce project manager work loads, possibly by expanding the Superfund work force, modifying expected accomplishments, and providing additional administrative and technical support;
- take immediate steps to offer a competitive compensation and incentive package to its key Superfund frontline personnel; and
- improve the technical knowledge, skills, and abilities of field staff through budgeted support of additional EPA training initiatives.

Other Planning Components

Our questionnaire results tended to provide mixed results regarding the adequacy of other planning components. For the most part, respondents generally appeared to be knowledgeable about the tasks to be performed but less knowledgeable regarding organizational responsibilities. Forty-five percent of regional project manager and attorney respondents believed the tasks to be performed had been effectively communicated to them, whereas 31 percent indicated that they had been ineffectively communicated. In this respect, 51 percent of the respondents indicated that EPA program guidance over the past year had increased their efficiency at work.

Concerning organizational responsibilities, about 38 percent of regional project manager and attorney respondents did not believe these responsibilities had been effectively communicated to the enforcement staff, whereas 30 percent did. Additionally, about 51 percent of the regional project manager and attorney respondents having a basis to judge indicated that the organizational separation between the technical and legal staff had decreased their efficiency at work over the past year. In EPA headquarters, OSWER has responsibility for the technical aspects of Superfund enforcement while legal enforcement resides in OECM. A similar split exists in EPA's regions.[1] In contrast, only 16 percent of the respondents believed this split increased efficiency, while the remainder believed it had no effect. The EPA Administrator's June 1989 report states that EPA will undertake a formal study of the organization of the Superfund enforcement program.

Conclusions

EPA has experienced numerous problems and delays in carrying out its Superfund enforcement activities. We believe EPA would be able to more effectively manage this program through better planning. EPA's various plans and strategies to implement its Superfund enforcement program lack specific measurable goals and time frames. Moreover, up until June 1989, EPA had no overall strategy to pull these individual strategies together with common objectives or goals. In June 1989, the EPA Administrator set forth his strategy for the Superfund program, including enforcement. The strategy identified specific objectives and the initiatives that were to be taken to achieve them. While a step in the right direction, neither this strategy nor EPA's subsequent implementation plan identifies the long-term measurable goals that are to be used to evaluate EPA's progress in achieving the strategy's objectives.

[1] In EPA regions, Superfund's technical staff is located in one division, generally a hazardous waste management division, while the legal staff is located in the region's Office of General Counsel.

Additionally, neither the June 1989 strategy or related implementation plan nor EPA's numerous enforcement strategies identify the resources required to implement them, even though limited staff resources were reportedly a contributing factor to many of the problems we found in the Superfund program. Concerning staffing needs, we concluded in our previous report that EPA needed to use more objective techniques to estimate Superfund's staffing needs.

While EPA's performance reporting/measuring systems have been an effective tool for driving EPA's work, these systems do not link goals operationally with the results to be achieved. Similarly, these systems lack productivity measures to assess the quality, timeliness, and efficiency of program delivery that would strengthen accountability and evaluations of changes in program performance. Finally, once these issues are addressed, apprising the Congress and the public of the results and providing them with periodic reports on EPA's progress should help increase accountability within EPA.

The EPA Administrator's plans for improving the availability and use of staff resources and the measures used to hold program managers and offices accountable in the Superfund program are a step in the right direction. However, we believe a more systematic planning process along the lines discussed in this chapter is needed to guide these initiatives.

Recommendations to the Administrator, EPA

To provide a systematic planning process to guide its initiatives for improving the management of the Superfund program, particularly its enforcement activities, we recommend that the Administrator, EPA,

- establish long-term measurable goals for achieving the objectives set forth in his June 1989 report and use those goals to tie its various enforcement plans and strategies together,
- identify the resources required to meet the long-term measurable goals of the Superfund enforcement program, and
- communicate these results to the Congress and the public and provide them with periodic progress reports in meeting goals and objectives.

In our earlier reports, we recommended that the Administrator, EPA, (1) link long-term goals operationally to SPMS accountability measures so progress can be better tracked, (2) include productivity measures in SPMS to assess the quality, timeliness, and efficiency of program delivery, and (3) examine the costs and benefits of using more objective techniques to

determine Superfund's staffing needs. We believe that these recommendations are still valid and are applicable to EPA's management of the Superfund enforcement program.

Summary of Questionnaire Results

U. S. GENERAL ACCOUNTING OFFICE

SURVEY OF EPA SUPERFUND ENFORCEMENT STAFF

INTRODUCTION

The U.S. General Accounting Office is currently reviewing EPA's Superfund enforcement program. The Congressional Subcommittee on Superfund and Environmental Oversight, Senate Committee on Environment and Public Works, asked us to determine how well EPA is (1) managing the Superfund enforcement program, (2) using its enforcement tools, and (3) carrying out its recovery of cleanup costs.

As part of our review, the Subcommittee asked us to survey EPA's technical and legal Superfund enforcement staff. As one of these employees, your views on these issues are important. So please complete the questionnaire and return it in the enclosed envelope. If you respond within the next 10 days, it will help us avoid costly follow-up mailings.

INSTRUCTIONS

- If you received your questionnaire at work, we encourage you to complete it at home or some other place where you are less likely to be distracted.
- If you have any questions about our survey, please contact Tom Storm or Bob Baney at (FTS) 252-0600.
- In the event the enclosed return envelope becomes separated from the survey, please return the completed questionnaire to:

  Mr. Thomas J. Storm
  U.S. General Accounting Office
  441 "G" Street, N.W., Room 4476
  Washington, D.C. 20548

Thank you for your help.

ID (1-5)
CD1 (6)

Note: Unless otherwise indicated all responses are expressed as percentages rounded to nearest whole number.

BACKGROUND

1. According to EPA records, you worked on Superfund enforcement activities for at least part of the past year. Is this correct? (Check one) N=360 (7)

   1. [ ] 100 Yes, I worked on Superfund enforcement in the past year
   2. [ ] *No, I did not work on Superfund enforcement in the past year

   *If no, stop here and return your questionnaire in the enclosed envelope

2. For which of the following EPA units do you currently work? (Check one) (8)
   N=355

   1. [8] Office of Enforcement and Compliance Monitoring
   2. [8] Office of Waste Programs Enforcement
   3. [10] Office of Emergency and Remedial Response
   4. [40] Regional Waste, Hazardous Waste, or Toxics and Waste Management Division
   5. [0] Office of Regional Counsel
   6. [ ] Other (specify):

3. Which of the following categories best describes your role or position in the Superfund enforcement program? (Check one)
   N=357 (9)

   1. [48] Project Manager
   2. [34] Enforcement Case Attorney
   3. [1] Technical Specialist
   4. [6] Program Specialist
   5. [13] Other (specify):

4. About how long have you worked on EPA's Superfund enforcement staff? (Check one)
N=251[a] (10)

1. [2] 6 months or less
2. [15] 7 to 12 months
3. [34] 13 to 24 months
4. [18] 25 to 36 months
5. [31] over 36 months

5. Typically, about how many of the total hours you work (regular and additional) each week for EPA do you spend on Superfund enforcement and how many do you spend on other assignments? (Enter numbers, rounded to nearest hour. If none, enter 0.)
Note: Responses are in median hours. (11-28)

	Superfund N=246[a]	Other	TOTAL EPA N=229[a]
Regular hours (up to 40 total)	35	5[b]	35
Additional hours (paid or unpaid)	5[b]	0[b]	5[b]
	N=230[a]		N=220[a]
TOTAL WEEKLY HOURS	40	5[b]	45

6. Is the total number of hours that you typically work each week more than you like, less than you like, or about the right amount? (Check one) N=251[a] (29)

1. [7] Much more than I like
2. [27] Somewhat more than I like
3. [63] About the right amount
4. [3] Somewhat less than I would like
5. [ ] Much less than I would like

7. About how many enforcement cases are you currently working on? (Enter numbers)
N=250[a] (30-35)

5 Superfund enforcement cases
Note: Median number of cases.
____ Other Superfund cases
____ Non-Superfund cases (e.g., RCRA)

8. Overall, do you feel that your current work load is too heavy, too light, or about right? (Check one) (36)
N=250[a]

1. [21] Much too heavy
2. [45] Somewhat too heavy
3. [30] Just about right
4. [3] Somewhat too light
5. [1] Much too light

9. Regions only: In your opinion, does your region need additional personnel--legal, technical, or administrative/clerical--to properly carry out the Superfund enforcement program? (Check one)
N=252[a] (37)

1. [82] Definitely yes
2. [14] Probably yes
3. [1] Uncertain
4. [1] Probably no
5. [2] Definitely no
6. [ ] No basis to judge

ENFORCEMENT MANAGEMENT ISSUES

10. Listed below are several potential components of EPA's Superfund enforcement strategy. In your opinion, overall, how effectively or ineffectively has EPA communicated each component to the enforcement staff? (Check one for each component) (38-45)

	Very Effective 1	Generally Effective 2	As Effective As Not 3	Generally Ineffective 4	Very Ineffective 5	No Basis To Judge 6
A. Statement of long-term goals/objectives in terms of desired results	N=350 8	35	17	27	11	2
B. Tasks to be performed to achieve goals/objectives	N=348 5	38	23	22	10	2
C. Milestones to be reached	N=348 14	37	24	18	5	2
D. Program priorities	N=349 8	30	28	20	12	2
E. Resource requirements	N=343 2	16	27	32	18	5
F. Organizational responsibilities	N=351 3	25	31	25	14	2
G. Methods to be used to track and measure progress	N=349 5	29	27	25	10	4

11. Over the past year how much have each of the following management factors increased or decreased your efficiency at work? (Check one for each factor) (46-57)

	Greatly Increased Efficiency 1	Somewhat Increased Efficiency 2	No Effect 3	Somewhat Decreased Efficiency 4	Greatly Decreased Efficiency 5	No Basis To Judge 6
A. Organizational separation of technical & legal staff	N=349 4	10	28	30	17	11
B. Headquarters--regional disagreements about policies, procedures, or priorities	N=351 0	3	27	43	21	6
C. EPA program guidance	N=347 3	45	23	21	6	2
D. Your workload	N=353 2	12	28	41	16	1
E. Workloads of other staff (e.g., RPMs, attorneys)	N=351 1	3	17	48	27	4
F. Availability/quality of support staff	N=351 0	9	10	30	50	1
G. Employee turnover	N=350 1	1	19	42	35	2
H. Your training in enforcement procedures	N=351 8	35	31	17	4	5
I. Amount of management review of staff case work	N=348 3	23	33	28	8	5
J. Management information systems (e.g., CERCLIS)	N=348 1	11	48	17	10	13
K. Stability of program priorities	N=345 1	8	34	31	14	12
M. Other (specify):						

12. In your opinion, should your regional office share information about Superfund enforcement activities/cases with other EPA regions more often, less often, or about as often as they now do? (Check one)

N=238[a] (58)

1. [53] Definitely more often
2. [38] Probably more often
3. [9] About as often as now
4. [ ] Probably less often
5. [ ] Definitely less often
6. [ ] No basis to judge; no opinion

13. In general, how satisfied or dissatisfied were you with the thoroughness of the PRP searches you used last year to decide whether or not to pursue enforcement or cost recovery actions, including DOJ referrals? (Check one) (59)

N=212[a]

1. [4] Very satisfied
2. [30] Generally satisfied
3. [16] Neither satisfied nor dissatisfied
4. [36] Generally dissatisfied
5. [14] Very dissatisfied
6. [ ] Did not use PRP searches last year

14. In general, do you believe the quality of PRP searches over the last year has increased, decreased, or stayed about the same as it was a year ago? (Check one)

N=159[a] (60)

1. [8] Greatly increased
2. [40] Somewhat increased
3. [48] Stayed about the same
4. [3] Somewhat decreased
5. [1] Greatly decreased
6. [ ] No basis to judge; no opinion

15. In your opinion, for cases where PRP searches fail to identify PRPs or financially viable PRPs are absent, how likely is EPA to take additional search action (including redoing an older search) or to reassess PRP financial viability before closing the case out as unenforceable/unrecoverable? (Check one)

N=191[a] (61)

1. [18] Very likely
2. [35] Somewhat likely
3. [15] About as likely as not
4. [17] Somewhat unlikely
5. [15] Very unlikely
6. [ ] No basis to judge; no opinion

ENFORCEMENT TOOLS

16. Overall, how satisfied or dissatisfied are you with the progress EPA has made in cleaning up hazardous waste sites through its Superfund enforcement program? (Check one)

N=243[a] (62)

1. [5] Very satisfied
2. [27] Generally satisfied
3. [23] Neither satisfied nor dissatisfied
4. [32] Generally dissatisfied
5. [13] Very dissatisfied
6. [ ] No basis to judge; no opinion

17. Overall, how satisfied or dissatisfied are you with the enforcement actions EPA has taken to obtain PRP response? (Check one) (63)

N=240[a]

1. [7] Very satisfied
2. [43] Generally satisfied
3. [17] Neither satisfied nor dissatisfied
4. [27] Generally dissatisfied
5. [6] Very dissatisfied
6. [ ] No basis to judge; no opinion

(18-20) A variety of Superfund enforcement activities are listed below. We have three questions that concern each of these activities. Please review each question and its rating scale. Then, select the number from each rating scale that comes closest to your response to each of the following questions:

18. Overall, how much case experience, if any, have you had with each of the listed enforcement activities? (Enter one number for each) (64-77)

Rating Scale: ID (1-5) CD2 (6)

1 = Extensive experience
2 = Great experience
3 = Moderate experience
4 = Some experience
5 = Little or no experience

19. In your opinion, has EPA overutilized, underutilized or appropriately utilized each of the listed enforcement activities? (Enter one number for each) (7-20)

Rating Scale:

1 = Greatly overutilized
2 = Somewhat overutilized
3 = Appropriately utilized
4 = Somewhat underutilized
5 = Greatly underutilized
6 = No basis to judge

20. Overall, how useful, if at all, have the listed enforcement activities been in carrying out the Superfund enforcement program? (Enter one number for each) (21-34)

Rating Scale:

1 = Extremely useful
2 = Very useful
3 = Moderately useful
4 = Somewhat useful
5 = Of little or no use
6 = No basis to judge

	Q.18 Personal Experience N=252 to 254[a] Median	Q.19 EPA Utilization (N=)[a]/Median	Q.20 Overall Usefulness (N=)[a]/Median
A. Issuance of information requests and follow-up letters	2	(235)/3	(235)/2
B. Use of subpoenas to enforce information requests	5	(152)/4	(90)/2
C. De minimis settlements	5	(154)/4	(147)/3
D. Special notice letters for RI/FS negotiations	3	(198)/3	(194)/2
E. RI/FS Negotiations	3	(215)/3	(215)/2
F. Special notice letters for RD/RA negotiations	4	(171)/3	(173)/2
G. RD/RA Negotiations	4	(181)/3	(181)/2
H. Alternative Dispute Resolutions (e.g., use of mediators)	5	(108)/4	(81)/5
I. Non-binding preliminary allocations of responsibility	5	(102)/3	(100)/3
J. Mixed Funding Settlements	5	(135)/4	(135)/3
K. Unilateral Administrative Orders	4	(190)/4	(187)/2
L. Demand letters	4	(165)/3	(163)/2
M. Section 106 referrals to DOJ to obtain court ordered cleanups	5	(153)/4	(141)/3
N. Section 107 referrals to DOJ	4	(158)/3	(162)/2

(21-25) In your opinion, how much, if at all, do each of the reasons listed below explain why EPA may not have used subpoenas, de minimis and mixed funding settlements, unilateral administrative orders, and section 106 referrals as often as they could have?
(Enter one number from the following rating scale for each reason and each tool)

(35-50) (51-66) (67-82) (83-98) (99-114)

Rating Scale:

1 = Very greatly explains
2 = Greatly explains
3 = Moderately explains
4 = Somewhat explains
5 = Little or no explanation
6 = No basis to judge/No opinion
7 = Not relevant

	Tools				
	Q.21 Subpoenas to enforce information requests (N=)[a]/ Median	Q.22 De Minimis Settlements (N=)[c]/ Median	Q.23 Mixed Funding Settlements (N=)[c]/ Median	Q.24 Unilateral Administrative Orders (N=)[d]/ Median	Q.25 Sec. 106 Referral for court ordered cleanup (N=)[c]/ Median
A. Potential payoff from using this tool is low or negative	(157)/5	(83)/4	(77)/5	(106)/5	(77)/4
B. Staff training/experience with this tool has been limited	(193)/3	(89)/4	(80)/3	(106)/5	(81)/4
C. Financial/staff resources are limited and/or management gives a low priority to the use of this tool	(184)/3	(87)/4	(76)/4	(104)/4	(79)/4
D. Available guidance on use of this tool is not adequate	(164)/4	(89)/4	(79)/4	(102)/5	(79)/5
E. Use of this tool is inconsistent with joint and several liability	(169)/5	(83)/5	(70)/4	(96)/5	(72)/5
F. PRPs already identified accounted for most waste and/or had enough resources to clean up sites	(187)/5	(83)/4	(73)/4	(95)/5	(75)/5
G. Settling parties have generally agreed to a full settlement	(178)/5	(83)/4	(77)/4	(97)/5	(75)/4
H. Non-settling PRPs have generally had poor financial viability	(170)/5	(83)/4	(74)/4	(97)/4	(77)/4
I. Cases against PRPs have been considered too weak	(176)/5	(83)/5	(72)/5	(98)/4	(76)/4
J. Evidence of "imminent and substantial endangerments" has been weak	(176)/5	(83)/5	(68)/5	(101)/4	(76)/4
K. Need for cleanup at sites has been too urgent to wait for litigation	(174)/5	(83)/5	(71)/5	(100)/5	(80)3
L. De minimis parties have generally not agreed or have not been well organized	(167)/5	(82)/3	(68)/5	(90)/5	(68)/5
M. Major parties have generally objected to de minimis settlements	(160)/5	(74)/4	(66)/5	(85)/5	(67)/5
N. No effective mechanism exist to ensure de minimis settlement funds will be available to major parties	(149)/5	(65)/4	(57)/5	(81)/5	(65)/5
O. Mixed funding is not available to cover orphan shares	(152)/5	(69)/5	(55)/4	(82)/5	(63)/5
P. Other (specify):					

ID (1-5)
CD3 (6)

NEGOTIATIONS AND COST RECOVERY

26. In your opinion, how worthwhile, if at all, is it to prepare written negotiation strategies with bottom line positions prior to beginning negotiations? (Check one) (7)

N=235[a]

1. [19] Extremely worthwhile
2. [28] Very worthwhile
3. [20] Moderately worthwhile
4. [12] Somewhat worthwhile
5. [21] Hardly or not at all worthwhile
6. [ ] No basis to judge; no opinion

27. In your opinion, how sufficient or insufficient has DOJ input been in developing RD/RA negotiation strategies? (Check one) (8)

N=140[a]

1. [7] Very sufficient
2. [26] Generally sufficient
3. [22] Neither sufficient nor insufficient
4. [27] Generally insufficient
5. [18] Very insufficient
6. [ ] No basis to judge; no opinion

28. In your opinion, how worthwhile, if at all, is it to establish a bottom-line cost recovery figure that must be received to avoid a section 107 referral? (Check one) (9)

N=198[a]

1. [20] Extremely worthwhile
2. [31] Very worthwhile
3. [23] Moderately worthwhile
4. [14] Somewhat worthwhile
5. [12] Hardly or not at all worthwhile
6. [ ] No basis to judge; no opinion

29. In general, about how long after a demand letter is issued does EPA wait for PRPs to settle before making a section 107 referral to DOJ? (Check one) (10)

N=95[a]

1. [34] 1-3 months
2. [32] 4-6 months
3. [15] 7-9 months
4. [19] More than 9 months
5. [ ] Don't know; no basis to judge

30. In your opinion, how willing or unwilling are EPA and DOJ to pursue treble damages when PRPs fail to comply with unilateral administrative orders? (Check one for each) (11-12)

	EPA N=136[a]	DOJ N=95[a]
1. Very willing	[16]	[3]
2. Somewhat willing	[22]	[17]
3. About as willing as not	[16]	[17]
4. Somewhat unwilling	[25]	[29]
5. Very unwilling	[21]	[34]
6. No basis to judge; No opinion	[ ]	[ ]

31. In your opinion, is the priority EPA gives to cost recovery too high, too low, or about right? (Check one) (13)

N=222[a]

1. [3] Much too high
2. [9] Somewhat too high
3. [37] Just about right
4. [29] Somewhat too low
5. [23] Much too low
6. [ ] No basis to judge; no opinion

32. In your opinion, has the time generally required to negotiate RD/RA settlements been more than, less than, or about the same as the time EPA allows through its special notice letter procedures? (Check one) (14)

N=102[a]

1. [8] Much more than allowed
2. [48] More than allowed
3. [24] About the same as allowed
4. [ ] Less than allowed
5. [ ] Much less than allowed
6. [ ] No basis to judge; no opinion

33. In your opinion, is the time allowed by EPA to negotiate RD/RA settlements too long, too short, or about right? (Check one) (15)

N=107[e]

1. [9] Definitely too long
2. [9] Probably too long
3. [39] About right
4. [25] Probably too short
5. [18] Definitely too short
6. [ ] No basis to judge; no opinion

34. In general, how much, if at all, do each of the following factors explain why it can take longer to negotiate RD/RA settlements than the time allowed by EPA? (Check one for each factor)

(16-30) (N=[c])	Hardly or Not at All Explains 1	Somewhat Explains 2	Moderately Explains 3	Greatly Explains 4	Totally Or Almost Totally Explains 5	No Basis To Judge 6
A. Number and/or disorganization of PRPs (108)	6	20	18	50	6	
B. Delaying tactics initiated by PRPs (109)	6	18	38	34	4	
C. Disagreements among PRPs (108)	4	18	30	44	4	
D. Number/complexity of issues to be settled (110)	2	10	21	56	11	
E. Total cleanup cost indicated by treatment remedy (102)	11	19	29	34	7	
F. Less than adequate preparation for negotiation by EPA (109)	35	33	19	12	1	
G. Newness of the RD/RA process under SARA (105)	39	33	20	7	1	
H. Disagreements between EPA and states (107)	23	25	33	18	1	
I. Disagreements among EPA staff (for example, RPM and ORC) (110)	56	30	9	5	0	
J. Disagreements between EPA and DOJ (105)	27	39	16	14	4	
K. Awaiting the availability of fund financing (102)	37	27	24	9	3	
L. Changes in EPA headquarter's priorities (103)	38	21	19	12	4	
M. Size of EPA staff workloads (109)	4	16	38	37	5	
N. Inexperience of EPA staff (110)	17	35	28	18	7	
O. Other (specify):						

35. Comments (Please use the space below to provide any additional comments you may wish to make.) (31)

Thank you for your cooperation.

[a]Number answering question represents those having a basis to judge from among the 255 regional project managers and attorneys responding to our survey.

[b]Computed from the other responses to this question.

[c]Number answering question represents those having a basis to judge from among regional project manager and attorney respondents with some to extensive experience using this tool.

[d]Number answering question represents those having a basis to judge from among regional project manager and attorney respondents with moderate to extensive experience using this tool.

[e]Number answering question represents those having a basis to judge from among regional project manager and attorney respondents with moderate to extensive experience in RD/RA negotiations.

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C.	Peter F. Guerrero, Associate Director, Environmental Protection Issues Lawrence J. Dyckman, Assistant Director Thomas J. Storm, Assignment Manager Robert J. Baney, Evaluator-in-Charge Richard T. Baden, Evaluator Carolyn M. Boyce, Advisor
Chicago Regional Office	James B. Musial, Regional Assignment Manager David C. Hoffman, Site Senior David I. Lichtenfeld, Evaluator Clark D. Meyer, Evaluator

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